

MAY THE FORCE OF TIME OF TIME BE WITH YOU!

Please rush me ______STAR WARS WATCHES at \$19.95 plus \$1.05 for postage and handling.

NAME ______ADDRESS _____

CITY____ZIP___

Business and Editorial Offices:

STARLOG Magazine O'Quinn Studios, Inc. 475 Park Ave. South, 8th Floor Suite

Publishers:

Norman Jacobs, Kerry O'Quinn

Assistant Publisher:

Ira Friedman

Editor:

Howard Zimmerman

Art Director:

Robert P. Ericksen

Senior Writer:

Ed Naha

Managing Editor: James C. Odell

Science Editors:

David Hutchison

Robin Snelson

Associate Editor:

Richard Meyers

West Coast Editor:

David Houston

Special Projects:

Tom O'Steen

Art Staff:

Laura O'Brien, Ted Enik

Production Assistants:

Rita Eisenstein, Beverly Gerdin-Campbell, David Hirsch, Peter Mosen

Contributors This Issue:

Gerry Anderson, Rick Baker, Louis Broadhurst, Michael Cassutt, Jonathan Eberhart, Ted Enik, Alan Dean Foster, Mick Garris, Gary Gerani, David Gerrold, Bert Gordon, Robert McCall, Ron Miller, Gina Neilson, Al Taylor.

About the Cover:

A rare look at one of the original spaceship designs executed by famed space artist Bob McCall for the upcoming NBC mini-series Buck Rogers. In this pre-production sketch, McCall depicts the massive "mothership," the Constitution. Closely akin to a battleship or, more correctly, an "aircraft carrier," the Constitution houses both Buck Roger's spaceship and a fleet of small, Star Wars-esque fighter craft. The Constitution can travel close to the speed of light and "warp" into different universes.

STARLOG is published eight times a year or every six and a half weeks by O'Quinn Studios, Inc., 475 Park Avenue South, 8th Floor Suite, New York, N.Y. 10016. This is issue Number 16, September 1978 (Volume Three). All content is copyright \$\infty\$ 1978 by O'Quinn Studios, Inc. Subscription rates: \$10.98 for eight issues delivered in U.S. and Canada; foreign subscriptions \$17.00 in U.S. funds. Second-class postage paid at New York, N.Y. and at additional mailing offices. Notification of change of address and renewals should be sent to STARLOG, Subscription Dept., P.O. Box 1999, Farmingdale, N.Y. 11737. STARLOG accepts no responsibility for unsolicited manuscripts, photos, art or other materials, but if free-lance submittals are accompanied by a self-addressed, stamped envelope they will be seriously considered and, if necessary, returned. Reprint or reproduction in part or in whole without written permission from the publishers is strictly forbidden.

FROM THE BRIDGE	4
COMMUNICATIONS	
Letters From Our Readers	5
Log Entries Latest News From The Worlds Of Science Fiction	6
STAR TREK REPORT	
A Fan News Column By Susan Sackett	20
ALAN DEAN FOSTER: STAR ON THE RISE	
Exclusive Interview With One Of Today's	00
Hottest SF Authors	_ 22
"BODY SNATCHERS" STRIKE AGAIN An Interview With Phillip Kaufman, Director Of	
The New "Invasion."	26
THE FILMS OF BERT I. GORDON	
Puppet People, Giant Insects, Rampaging Dino- saurs And The End Of The World: Gordon Has	
Done It All.	28
"FANTASTIC VOYAGE" REVISITED	
Looking Back At One Of The Most Incredible Journeys Ever Undertaken In An SF Film	34
CELEBRATING SPACE	
A Stunning Collection Of Commemorative Stamps From Around The World	39
Stamps From Around The World	33
BUCK ROGERS: THE SHIPS YOU WON'T SEE ON TV	
Space Artist Bob McCall's Preproduction Designs For Buck's 25th Century Spacecraft	42
"THE INIVADEDC"	
"THE INVADERS" The Full Story Of This Early Video Invasion	
With A Complete Episode Guide	46
THE RED RIVER From CBS TV's Awesome Series, "The Body Human"	52
STATE OF THE ART	
A Column By David Gerrold	56
SPECIAL EFFECTS—PART XI	
Supermarionation—An In-Depth Look At Gerry Anderson's SF-Puppet Empire	58
FUTURE CONVENTIONS	66
SOLAR POWER SATELLITES	
Two Proposed Orbital Systems For Utilizing The	07
Clean, Limitless Energy Of The Sun	67
INTERPLANETARY EXCURSIONS, INC.	
Port Of Call: The Incredible Shrinking Planet CLASSIFIED INFORMATION	
VISIONS	12
The Invisible Visions Of Star Wars	76
LASTWORD	78

FROM THE BRIDGE

n the entire history of the world, there have been only two basic types of governments: those which hold individual rights to be supreme, and those which don't.

Most governments of the past and most governments of today fall into the latter category. Whatever the country, whatever the political system, whatever the disguise created by the leaders of the country—most governments are *not* structured so that the people are able to conduct their lives without restraints and controls.

I received a letter last week from a young Hungarian boy. His plea is worth thinking about:

". . . I would be most grateful if you could send me a complimentary copy of STARLOG and FUTURE free of charge. I am very interested for them. I have some difficulty with the payment of these because I am living in a socialist country and from there a private person must not send dollars or any other currency to U.S.A."

First, imagine living under a government which does not allow its people to spend their own money as they wish.

Second, imagine living under a government which makes you think of yourself as a 'private person'—as opposed to, presumably, a 'government person.' Imagine a government that makes its people think of themselves as common, inferior beings with fewer rights than those in upper echelons.

Governments which attempt to bind people into a mass of non-individuals not worthy of enjoying rights, have been a favorite subject of science-fiction writers. You have read variations of life-controlling governments in books like Anthem, This Perfect Day, Brave New World, and Logan's Run. You have seen other variations in movies like 1984, Soylent Green, Rollerball, and Zardoz. Episodes of Star Trek and Space: 1999 dramatized the long-range results of government systems that do not hold individual rights as supreme.

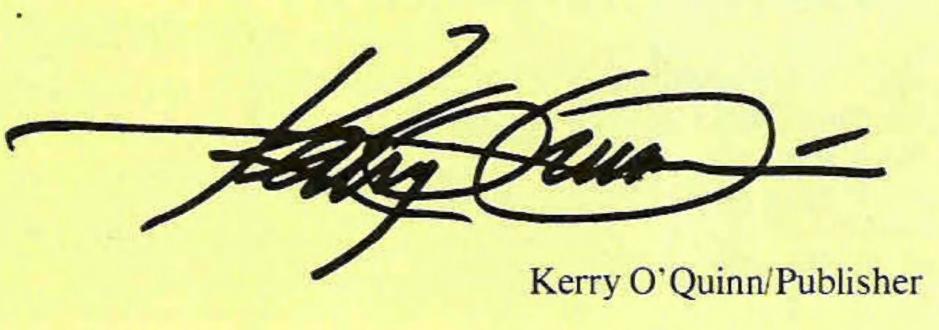
The theme is perfect for the science-fiction genre, which can project into the future and paint a Technicolor picture of the kind of disaster that can grow out of certain "seeds" in our present-day world. It's a type of story in which we see individual struggle and heroism (Man at his best) against power-mad plots to control people's lives (Man at his most depraved).

But if we walk away from these dramas feeling *only* the tingle of excitement, we commit inadvertent treason against values we should be fighting for today. Long before a government acquires the power to build a Death Star, so to speak, the "seeds" must be spotted and killed.

"Seeds" are almost always disguised with sugar-coating ("good" justifications), but if we look carefully, we can see them. When we hear of a law that prevents competition with the government postal service; when we hear of a law that punishes people for not buying government retirement insurance; when we hear of a law that imprisons people for smoking or drinking or having sex the way they like; when we hear of a law that forces one company to hand over knowledge to its competition or sets how much a company can charge for its own products or establishes what days it can open for business—we must recognize these for what they are.

And, at the same time, let us pause now and then to be grateful for the fact that America's government does not prevent our buying magazines from STARLOG or from Hungary or from anywhere in the galaxy.

At least, not yet . . .



Because of the large volume of mail we receive, personal replies are impossible. Comments, questions, and suggestions of general interest are appreciated and may be selected for publication in future Communications. Write:

STARLOG COMMUNICATIONS 475 Park Avenue South 8th Floor Suite New York, N.Y. 10016



Art: © DC Comics

COMIC BOOK HEROES

... I found David Houston's article on the birth pangs of a television science-fiction comedy very entertaining and enlightening in more than one area. It answered, in part, the age-old question of "where do you get your ideas."

In the case of illustrator Don Dixon, I think the question will be answered again when viewing the enclosed art that originally appeared in the DC Comics' Mystery In Space No. 80, December, 1962 in a "Star Rovers" story written by Gardner Fox and drawn by the late Sidney Greene.

It seems as if trends have gone the full cycle as television looks again to the comic books for inspiration. Let us hope that Wonder Woman, Spider-Man and the Hulk fare as well as Batman did in the initial ratings and better than the Caped Crusader in the realm of artistic integrity.

Jack C. Harris Editor, DC Comics Inc.

SECRET REVEALED

... With all the new SF movies being released and new programs planned on TV, I started to think about all the old shows on TV. There was The Twilight Zone and The Outer Limits which most people remember and Men Into Space which is remembered by fewer fans. But there is one I would like to

COMUNICATION

know about. I dimly remember a program called *Top Secret* which was broadcast sometime in the 1950's. This program was similar in format to the series *Science Fiction Theater*. There was a different story every week. I would appreciate knowing if this program existed or is it only my imagination?

Don Hester P.O. Box 40 Kearny, N.J. 07032

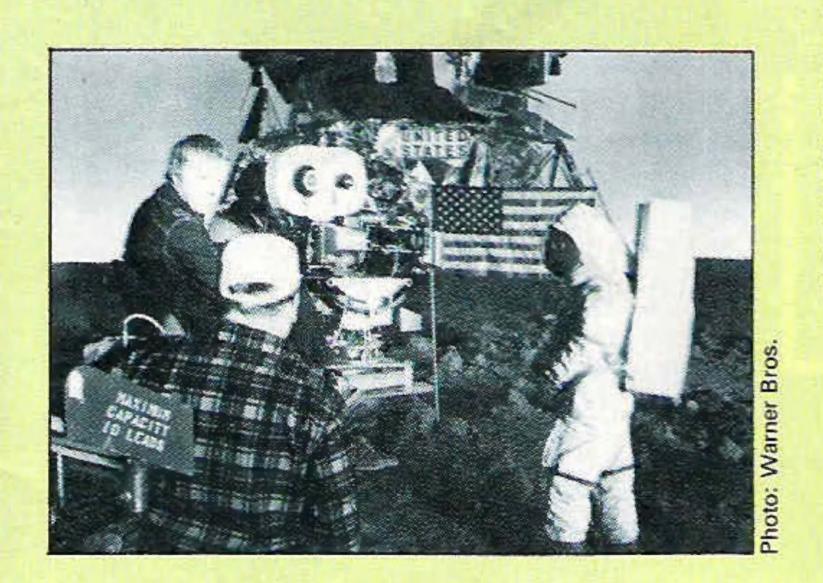
The show you remember was called Top Secret U.S.A. and was syndicated in 1954. A weekly half-hour offering, it concerned government undercover agents working for the Bureau of Scientific Information. The stars were Paul Stewart and Gena Rowlands.

ADDRESS GUIDES

... I would like to know if you can put the following addresses in STARLOG so we can write to them: Michael York, Jenny Agutter, Richard Jordan, Martin Landau, Barbara Bain, Mark Hamill, Harrison Ford, Carrie Fisher, Peter Cushing, Alec Guinness, Gregory Harrison, Heather Menzies, Donald Moffitt, Randy Powell, Leonard Nimoy, William Shatner, etc., etc., etc.

Don Paxson 1732 Renee Dr. Kettering, OH 45440

We are constantly flooded with requests for cast and production crew addresses, and if we took the time to answer all these pleas, you would never see our magazines. Frankly, our business is producing a super magazine every three weeks—not answering mail. However we do understand the need, and in order to provide the information our readers request we published a guide to Television Addresses in STARLOG No. 5 and a guide to Movie Addresses in STARLOG No. 6. These are invaluable for all fans, and we recommend that you order them from our back issues ad elsewhere in this issue. Write on . . .

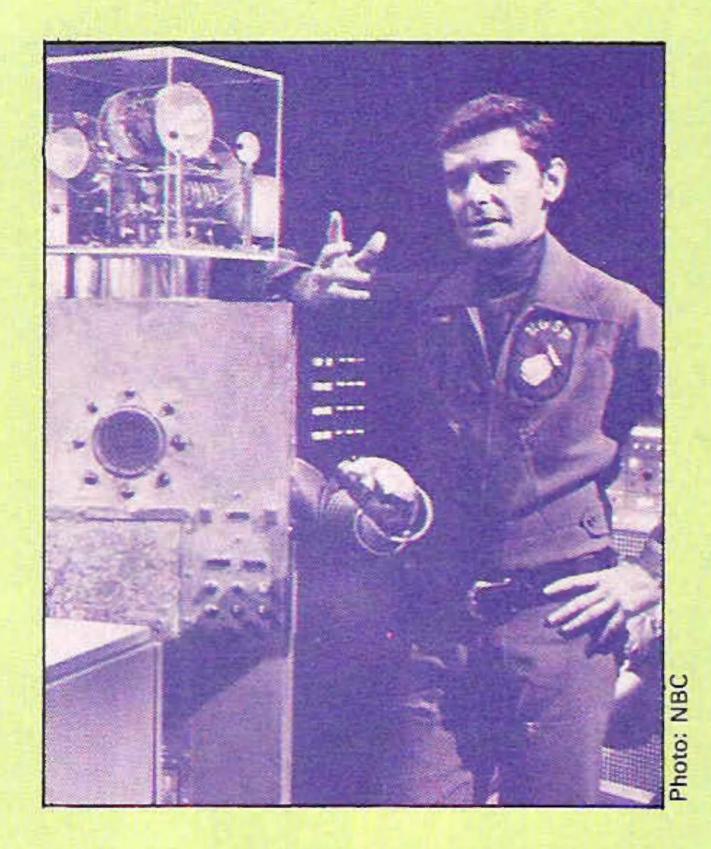


CAPRICORN CRITIC

. . . Perhaps Bob Shafer is correct when he infers that Capricorn One has as much chance of having any political effect as SW or CE3K have. However, I won't be surprised if politicians against the space program (Senator William Proxmire of Wisconsin for one) use it to reinforce and propagate their feeling of "that's probably what happened in 1969." I feel very negatively towards this movie. It

worries me. No matter how well it may be done, it'll be a negative factor in our campaign to further space exploration. It'll put ideas in people's minds and reinforce others. I personally prefer private sponsorship of space exploration but NASA's all we've got. Its credibility is considered to be nil already. It doesn't need anything to add to its problems. Capricorn One may be harmle'ss. But it may also be another step backward (and God knows we've had more than enough of those) for our dreams.

Sandra H. Necchi 73 Campbell St. Fall River, Mass. 02723



QUARKERS?

now in the hands of the NBC series Quark now in the hands of the National Broadcasting Company and the two thousand Nielson families, we are calling for your help. We believe that we can do what Trekkers did a decade ago, pressure NBC into making it a fall season series. We urge you to write NBC and tell them what you think of the show and also send a xerox copy of your letter to us to keep a tally on how many letters are sent to NBC. We are going to send all of the xerox copies to NBC in case your letter was lost in the mail. May the source be with you.

Darren Domek Chairman National Save Quark Association 8869 Brierwood Rd. Jacksonville, Fla. 32217

CANTINA BAND FAN

... I am writing to ask if you can give me any information on where I may obtain a picture of the cantina band from Star Wars. I have been through all of the locally available material on the movie but I have been unable to find anything on the band. I am a modeler and would like to attempt a diorama of the band.

H.J. Barr Jr. P.O. Box 302 Grottoes, VA 24441 For a color photo of the delightful group of galactic musicians, pick up a copy of STAR-LOG's latest Photo Guidebook, Science Fiction Aliens.

PLANETARY TOURIST

STARLOG for its great new regular feature, Interplanetary Excursions, Inc. I've always wanted to go into outer space—but to see the skies on other planets, come on! I loved the artwork, and I can't wait to see and read about where we go next time!

Leslie Nipps Croton Falls, NY 10519

SF SOUNDTRACKS

To the hundreds of readers who kindly responded to our ballot in STARLOG #14 (pg. 50) by giving us your suggestions and preferences in movie and TV music scores: Thank you for an overwhelming response! We have tabulated the votes and discussed the results. We will not, at this time, give away future surprises, but we can tell you that we are presently negotiating for the legal rights and doing the research necessary to release several favorites within the next year.

As you can see by the new ad in this issue, our first STARLOG RECORDS release, Rocketship X-M, has been joined by a second album, The Fantastic Film Music of Albert Glasser—a spectacular collection which includes original soundtrack suites from six movies and two TV series. It is fantastic! If you love movie music you will not be disappointed with this new record.



STAR CARS

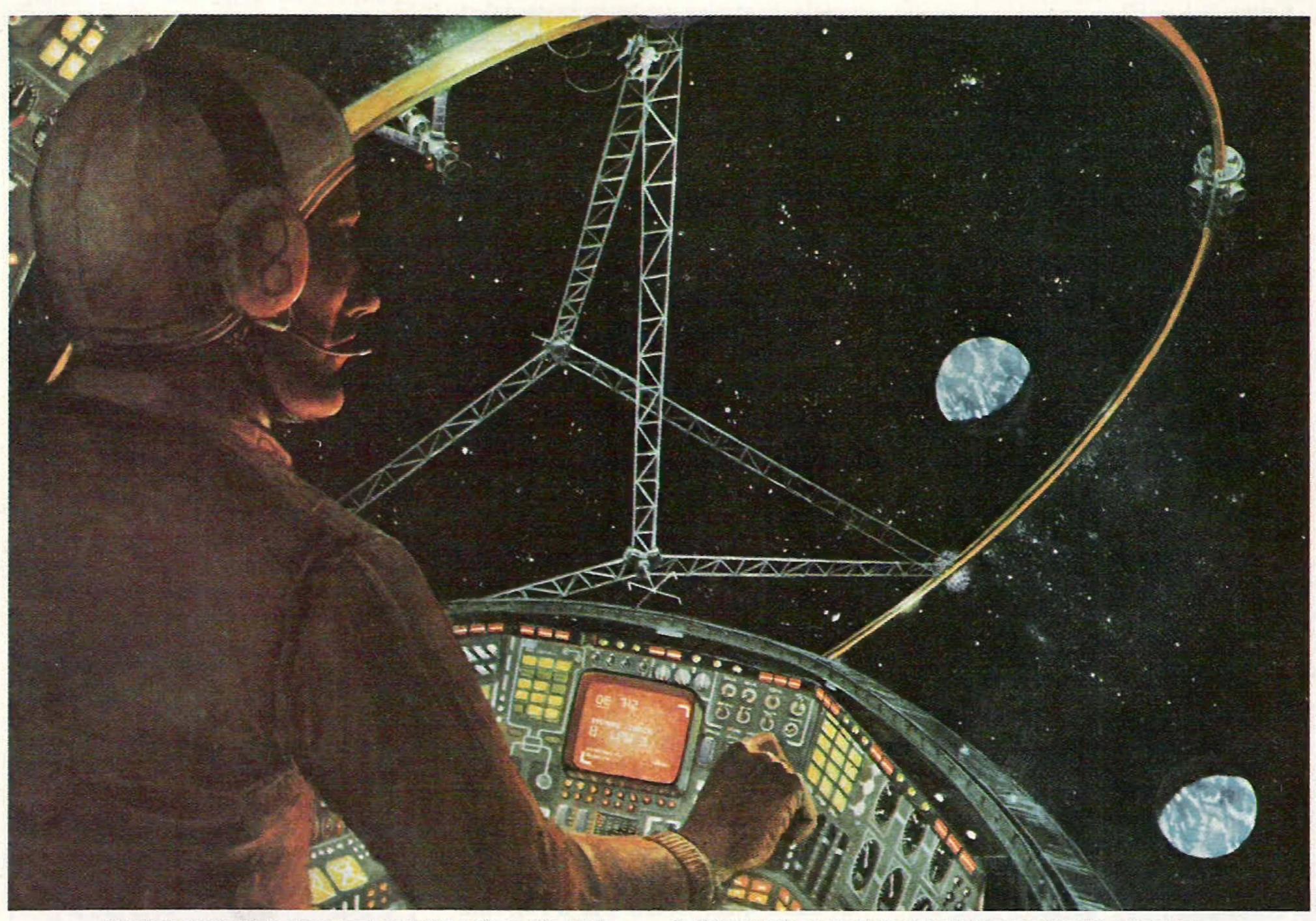
... Please print the enclosed photo in an upcoming issue of STARLOG. I feel sure that thousands of Star Wars fans would enjoy seeing how another fan expresses his admiration for the best SF/fantasy film to date. I am planning an "R2-D2" plate for my other car.

John Chanitz Rt. 1 Elsberry, MO 63343

ATTENTION SUBSCRIBERS: Please do not send merchandise orders in with your subscription renewals. Since all subscription renewals and complaints are handled at P.O. Box 1999, Farming-dale, N.Y., 11737, your order may be delayed up to a week.

LOG ENTRE

MIRRORS IN SPACE FOR LIGHT, ENERGY & FOOD ON EARTH



"Light industry" in space: giant mirrors in Earth orbit could provide extra illumination for several purposes.

In this artist's conception, Soletta construction is nearly complete—astronaut sees Earth reflected in massive mirror.

It's a simple idea: build a giant mirror in space to reflect sunlight down to Earth. The question is—why? The man who has the answers is space scientist Dr. Krafft A. Ehricke, leading proponent of Space Light. Dr. Ehricke believes extra illumination from space mirrors can serve several useful purposes, and contribute to solving energy and food shortages predicted for the future.

Dr. Ehricke has given the basic space mirror concept several names, each according to its end use. For instance, a Soletta (little sun) might be used to illuminate cities at night, using far less energy than is required to power streetlights. A Soletta could be moved in orbit and refocused, so one mirror could be used in a variety of locations or refocused in emergency

situations to, say, provide light for clean-up in a disaster area.

Another idea is the Powersoletta—using the giant mirror to focus extra light on a ground-based array of photovoltaic cells, which transform light into electricity. That would assure a continuous flow of power even during overcast conditions or at night. (The drawback to using Powersoletta at night is that light spillover would create an effect somewhere between midnight Sun and aurora for miles around.)

Biosoletta is a third way to employ the space mirror concept. Dr. Ehricke believes that large areas of the ocean which don't now receive enough sunlight for large-scale food production could be converted into "macroponds," or self-contained sea farms. An area of 100,000 square kilometers in fertile Arctic or Antarctic waters could, with the extra sunlight provided by Biosoletta, produce enough seafood to supply the protein requirements of 180 million people. In fact, Dr. Ehricke thinks one Biosoletta could "photon-fertilize" two ocean farms—one in the Arctic and one in the Antarctic—irradiating both areas in alternating 12-hour shifts.

Dr. Ehricke, who heads his own California consulting firm, Space Global Corp., doesn't have any immediate takers for his Soletta concept, though he's hopeful for the future.

"Through industrial utilization of Space Light," said Dr. Ehricke, "we may gain enhanced production of both food and energy—perhaps the most important legacies our generation can bestow on those to come."

H: NASA

STARLOG & STAR WARS **DEBUTIN JAPAN**

In the past, when Japanese sciencefiction fans have been bowled over, it has usually been due to some impromptu wrestling on the part of Godzilla, Ghidrah or one of their behemoth cronies. This month, however, the Nipponese SF scene has witnessed the impressive debut of two new heavyweight SF "stars:" the film Star Wars and our own STARLOG magazine! While audiences were still reeling from the sight of their first widescreen Wookie, newsstands of the nation began stocking the first Japanese language issue of STARLOG/FUTURE, a single magazine composed of features culled from the two American publications.

The premier Japanese edition offers STARLOG No. 7's cover article on Star Wars as well as features, interviews, photos and art originally appearing in recent copies of both STARLOG and FUTURE. Subsequent Japanese issues will produce more of the same, with past and present articles mixed into a colorful science fiction smorgas-

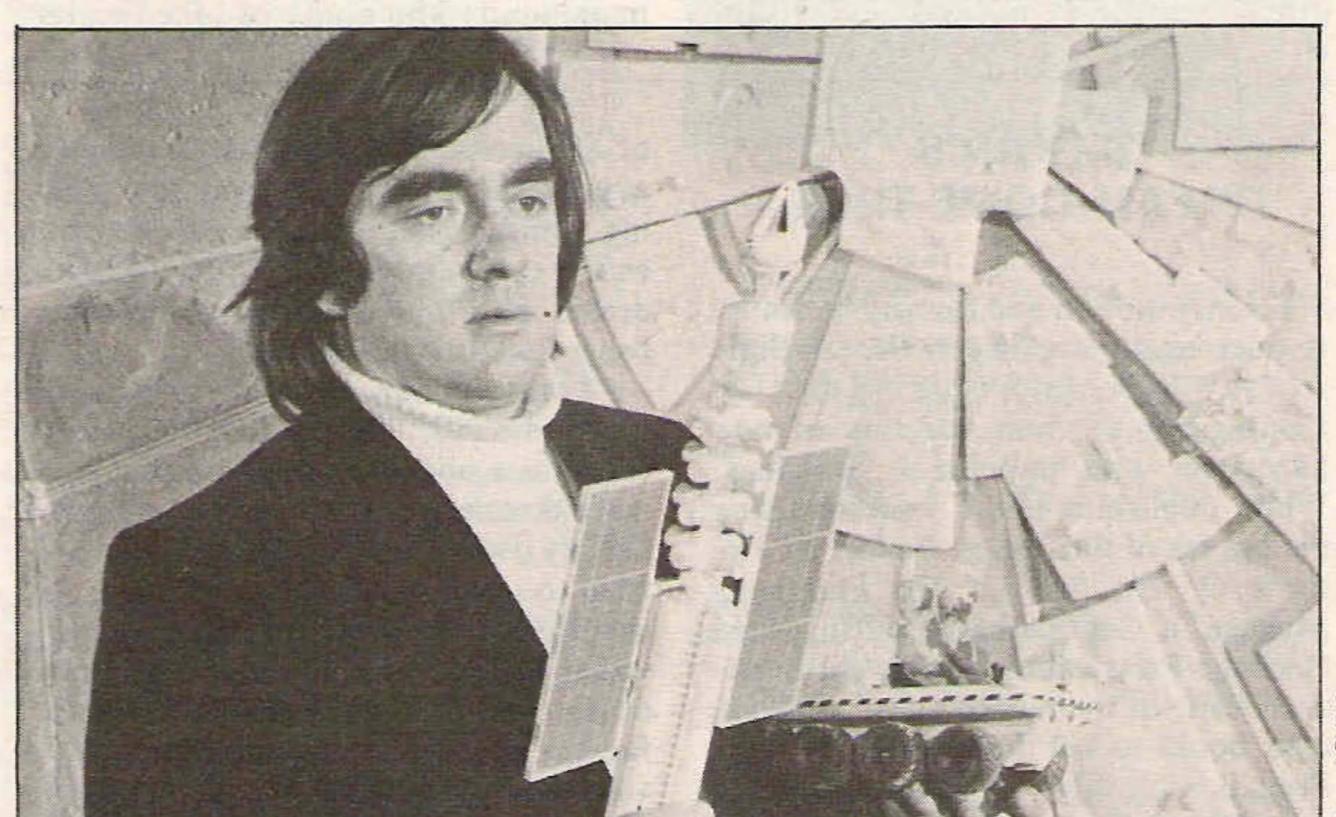
bord.

Although STARLOG and FUTURE have foreign subscribers to the English versions of the magazines, this is our first foreign language edition. STARLOG's stateside publishers and staff are just as excited as Japanese publisher Shozo Tsurumoto, editor Koh Miyamura and their U.S. representative Jun Shimizu over this STARLOG landmark. Watch future Log Entry items for more news on upcoming foreign language editions as STARLOG and FUTURE make their way across the globe.



SPACE SFX WIZ ON STAR WARS II

Brian Johnson, the special effects master who created the visual magic of Space: 1999, was recently named Supervising Director of Special Visual Effects for the new Star Wars II, replacing John Dykstra (currently shooting Battle Star "Galactica" for ABC-TV). Johnson will shoot some of the optical work in California for a scheduled period of 18 months, but the bulk of the work will be done in England at Shepperton, Elstree and Bray Studios (where he filmed Space: 1999's effects). Brian's other credits include Stanley Kubrick's 2001: A Space Odyssey, Gerry Anderson's Day After Tomorrow and Alien Attack, and recently The Medusa Touch and Revenge Of The Pink Panther.



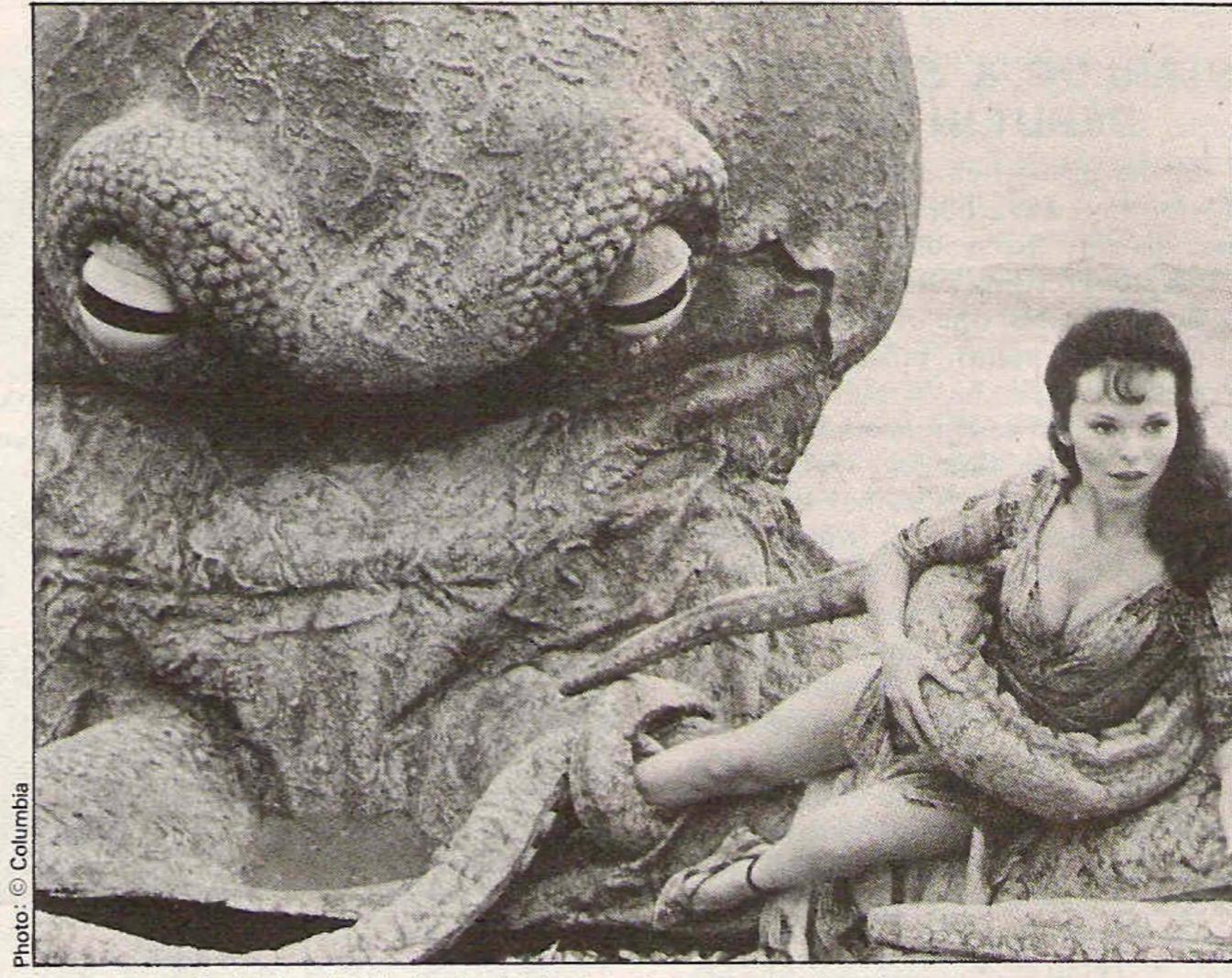
Space: 1999's Brian Johnson with some of his special effects creations.

SF FILMS TO EXPLORE BOTH THE DEEP AND THE SHALLOW

Within months, Earth-bound movie audiences will be subjected to terrors emanating from every possible science-fiction fantasy locale in existence. Atlantis, Mars, Hell and local marshes will all find their way to the silver screen before the year is out.

Leading the onslaught of exotic adventures is Warlords of Atlantis, the John Dark/Kevin Connor production first known as 7 Cities To Atlantis. To be released in August by Columbia Pictures, this original epic of the Edgar Rice Burroughs school of literature concerns the fate of Doug McClure, Peter Gilmore and their marine exploration team after they are captured by the remnants of the lost civilization of Atlantis. All seven cities are present and accounted for, as are a few quite ugly marine monsters. If the mammoth monsters aren't enough to keep McClure and his minions worrying, the Atlanteans themselves are. Descendants of the true Martian race, the underwater denizens have this quaint notion that, if their Earth prisoners are transformed into mermen, their homeland will be free of the marauding sea creatures forever. All of the Atlanteans' worries are the work of screenwriter Brian Hayles, famous in the U.K. for his Dr. Who TV antics.

A little underwater adventure probably would have come as a relief to Kirk Douglas, the recipient of a trip to Hell-on-Earth in his recent anti-Christ thriller *The Chosen*. Concerning the adventures of an industrialist plagued by both his anti-nuclear-power-plant-geared son and the latest spawn of Satan, the movie (originally dubbed *Holocaust 2000*) set some sort of box office record. It opened and disap-



Lea Brodie (Delphine in Warlords of Atlantis) relaxes on the beach with a friend.

peared in most cities within five days. Watch for it on TV soon.

Determined not to wind up on the video airwaves until making a big splash in theaters across the country is Toei's tale of space warfare, *Message From Space*. Starring Vic Morrow and martial arts champ Sonny Chiba, this SF-fantasy combines elements of SF hardware with traditional Japanese swordplay. It is being released in Space Sound.

Spacey sounding but devoid of any SF trappings is *The Water Babies*, an animated feature from Peter Shawe. Directed by Lionel Jeffries, this fantasy is based on Charles Kingsley's beloved fantasy tale concerning the marshland kingdom of the water

faeries. The film features the voices of James Mason, Bill Whitelaw, Bernard Cribbens, Joan Greenwood and David Tomilson.

Currently in the planning stages is Weatherman, a John Chavez production concerning man's future practice of controlling the weather for his personal gain. Yet another new title on the SF roster is Virginia Lively Stone's space adventure, Galaxy. Scripted by J.A.S. McCombie, the film concerns "the regeneration of a spoiled adolescent." Special effects will be in Laser-Vision and will spotlight a six-mile-long space station. Also in the works are Irwin Yablans' Halloween and Greg Kerr's SF comedy-adventure Journey Through The Universe.

SF FAN'S DREAM-COME-TRUE

Science-fiction and fantasy literature is once again basking in the limelight today, with bookstores across the U.S. fighting for the best selection of new hardcover and paperback offerings. While publishing-house hucksters sing the praises of their latest Return Of The Bride Of The Son Of The Enterprise package, a Georgia-based outfit called Heritage Press calmly avoids the hustle and bustle of the marketplace, allowing their books to sell themselves. Heritage Press is a bit different than most of its competitors. For one thing, its volumes are more elaborate than the current crop

of SF books. The paper is of a higher quality, the illustrations more spellbinding. And, most amazing of all, the entire company is the offshoot of a dream once cherished by young publisher Richard Garrison.

"I've loved SF since I was eight or nine years old," he explains. "I collected comics and illustrated books. I always dreamed of the time I could publish my own." A few years ago, Richard tried to make his dream come true. An art director at a local printing company, young Garrison put together a SF book of his own. Enlisting the aid of some of fantasy's top artists, he published a twovolume set of original Flash Gordon art. The books, Heritage I and Heritage II featured work by Frank Frazetta, Gray

Morrow, Neal Adams, Alex Raymond and dozens of others. Much to Richard's surprise, the volumes sold out! Now, together with his wife and editor Ginger Kaderabek, Richard is turning his hobby into a full-time operation. Each Heritage book will have a turn-ofthe-century look, with specially commissioned artwork, in both black and white and in color, by some of the genre's finest illustrators. The artwork will be placed in each book by hand and each edition will be numbered, part of a limited run. "The books are real finds for collectors," Richard stresses. "We have a good reputation with a lot of professional people because we turn out such quality volumes. Now, we have

(continued on page 10)

The very best reading in or out of this world,

4 = 0 R10 \$ with membership

Choose any 4 books, including these science fiction greats: THE HUGO WINNERS, Volume I & II-23 gripping short stories. A giant, handsome 864-page record of greatness. THE FOUNDATION TRILOGY by Isaac Asimov is an SF Classic that forecasts the return to barbarism. TIME STORM by Gordon R. Dickson. The most recent novel by one of the biggest names in science fiction.

What a way to get acquainted. Browse through the list of books on this page and choose any 4 for just 10¢.

It's the most extraordinary sample of science fiction ever offered in one package.

Here's how the Club works:

When your application for membership is accepted, you'll receive your choice of 4 books for just 10¢ (plus shipping and handling). If not absolutely fascinated, return them within ten days-membership will be cancelled and you'll owe nothing.

About every 4 weeks (14 times a year), we'll send you the Club's bulletin describing the 2 coming Selections and Alternate choices. If you want both Selections, you need do nothing; they'll be shipped automatically. If you don't want a Selection, or prefer an Alternate, or no book at all, just fill out the form always provided, and return it to us by the date specified. We try to allow you at least ten days for making your decision. If you don't get the form in time to respond within 10 days, and receive an unwanted selection, you may return it at our expense.

2329 The Hostage of Zir. By L. Sprague de Camp. Office manager Fergus Reith is drafted for the job of interstellar tour guide, and the most unnerving aspect is his first group of tourists. Pub. ed. \$7.95

7849 Close Encounters of the Third Kind. By Steven Spielberg. Novelization of the hit movie about Earth's first contact with an alien race. Pub. ed. \$7.95

6403 The Star Trek Reader III. Adapted by James Blish. 19 more outstanding and exciting adventures of the Starship Enterprise and its gallant crew. Pub. ed. \$8.95

4465 Three Hainish Novels. By Ursula K. Le Guin. One of SF's major talents explores the isolation of humans in alien worlds in Rocannon's World, Planet of Exile and City of Illusions. Comb. ed. \$23.85

0141 Time Storm. By Gordon R. Dickson. A major novel by one of SF's best writers. Gripping adventure and fascinating ideas set in a vast scope of time and space. Pub. ed. \$10.00

4499 The Persistence of Vision. By John Varley. Imagination and wit abound in this plicit scenes and language may be offensive to some. Pub. ed. \$9.95

0380 Up The Walls of the World. By James Tiptree, Jr. Aliens from Tyree try to escape destruction by transferring their minds into beings on another planet-Earth. Pub. ed. \$8.95

0372 Splinter of the Mind's Eye. By Alan Dean Foster. The further adventures of Luke Skywalker and Princess Leia Organa. Pub. ed. \$7.95

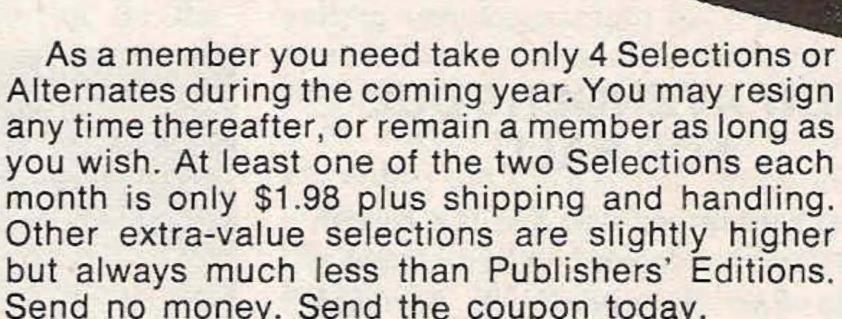
8532 The Hugo Winners, Vol. 1 & II. Giant 2-in-1 volume of 23 award-winning stories, 1955 to 1970. Asimov introduces each. Pub. ed. \$15.45

4440 Stellar Science Fiction Stories #4. Judy-Lynn del Rey, ed. Six original stories about alien races, Galactic Empires and fabulous inventions by SF authors Stephen R. Donaldson, Alan Dean Foster and others. Explicit scenes and 1 language may be offensive to some. Special ed.

0414 Mastodonia. By Clifford D. Simak. An archeologist discovers time trails in his backyard but doesn't anticipate the dangers that follow. By the author of A Heritage of Stars. Pub. ed. \$7.95

entertaining collection of short stories by 6221 The Foundation Trilogy. By Isaac the author of The Ophiuchi Hotline. Ex- Asimov. The ends of the galaxy revert to barbarism. An SF classic. Comb. price \$19.85

The Science Fiction Book Club offers its own complete hardbound editions sometimes altered in size to fit special presses and save members even more. Members accepted in U.S.A. and Canada only. Canadian members will be serviced from Toronto. Offer slightly different in Canada.



OUNDATION

FOUNDATION and EMPIRE

Constitute W. Wis-Lines

Send no money. Send the coupon today.

Science Fiction Book Club

Dept. SR204, Garden City, N.Y. 11530

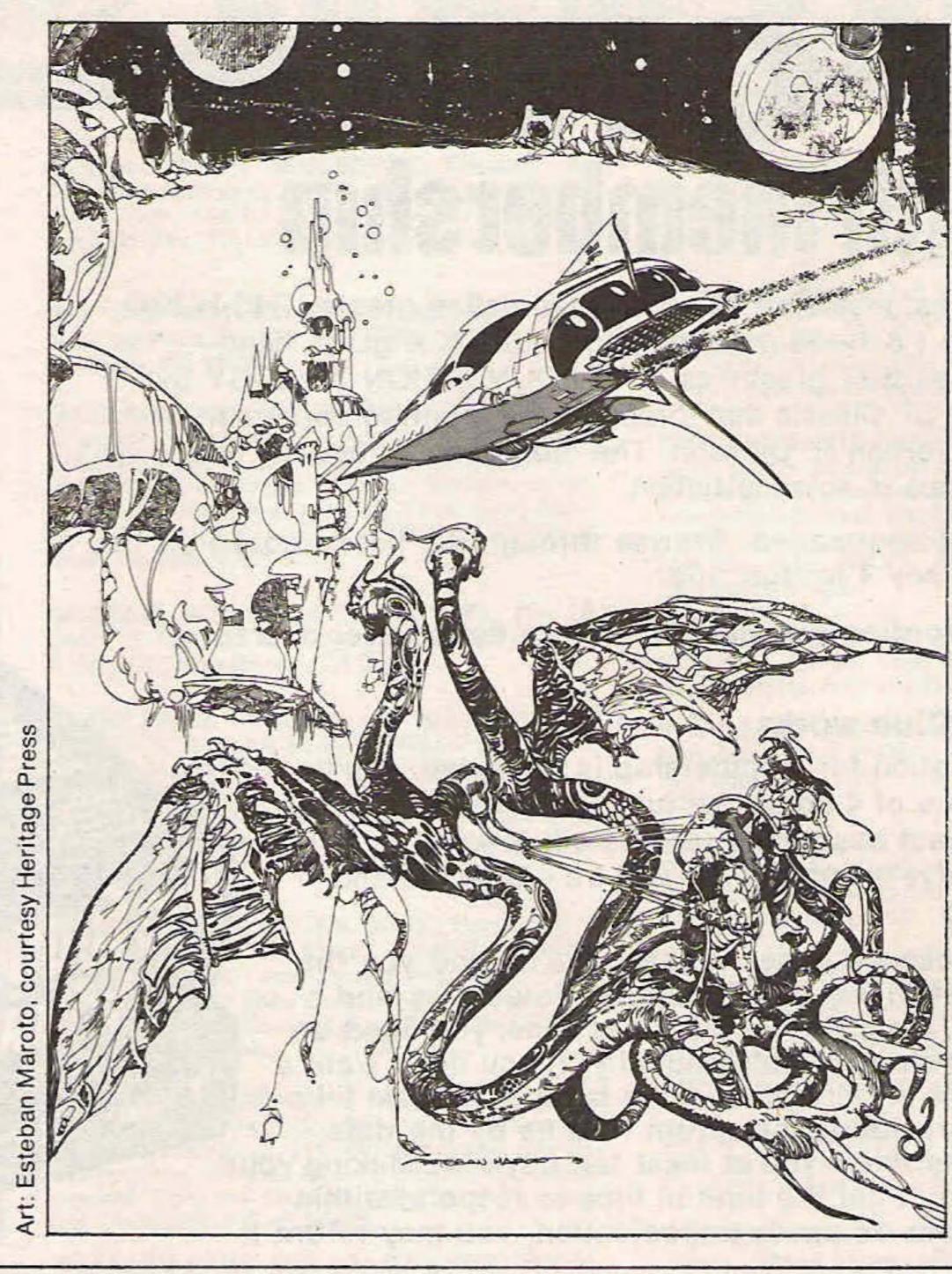
I have read your ad. Please accept me as a member in the Science Fiction Book Club.

Send me, as a beginning, the 4 books whose numbers I have indicated below, and bill me just 10¢ (plus shipping and handling). I agree to take 4 additional books during the coming year and may resign anytime thereafter. SFC books are selections for mature readers.

Mr.		
Mrs. Miss		
	Please print	HEEF RELIF
Address	A Transaction of the same	Apt
City	State	Zip

45-S119

authors approaching us about possible books. It's an honor, a thrill." Heritage Press' first hardcover, master fantasy writer Thomas Burnett Swann's final work, Queen Walk In The Dusk is illustrated by Jeff Jones and has been presented an Award of Excellence by the American Institute of Graphic Art. It will be displayed across the nation in a graphics show. Future hardcover volumes to appear include a special tribute volume of 3,000 editions of Glory Road and Starship Troopers by Robert Heinlein with original art by Kelly Freas; Heroes And Hobgoblins, a collection of light verse by L. Sprague de Camp with illustrations by Tim Kirk, and San Diego Lightfoot Sue And Others by the late Hugo Award winner Tom Reamy. On the lighter side of things, Heritage is following up SF comic artist Michael Goodwin's hysterical Who Was That Monolith I Saw You With? with two more titles in paperback. And this selection is only the beginning of Heritage Press, says Richard. "We plan on publishing both classics and new work in the genre. We want to do everything." Any interested SF buffs can drop Richard or Ginger a line at P.O. Box 721, Forest Park, Georgia 30050, for further information on this exciting new publishing venture.

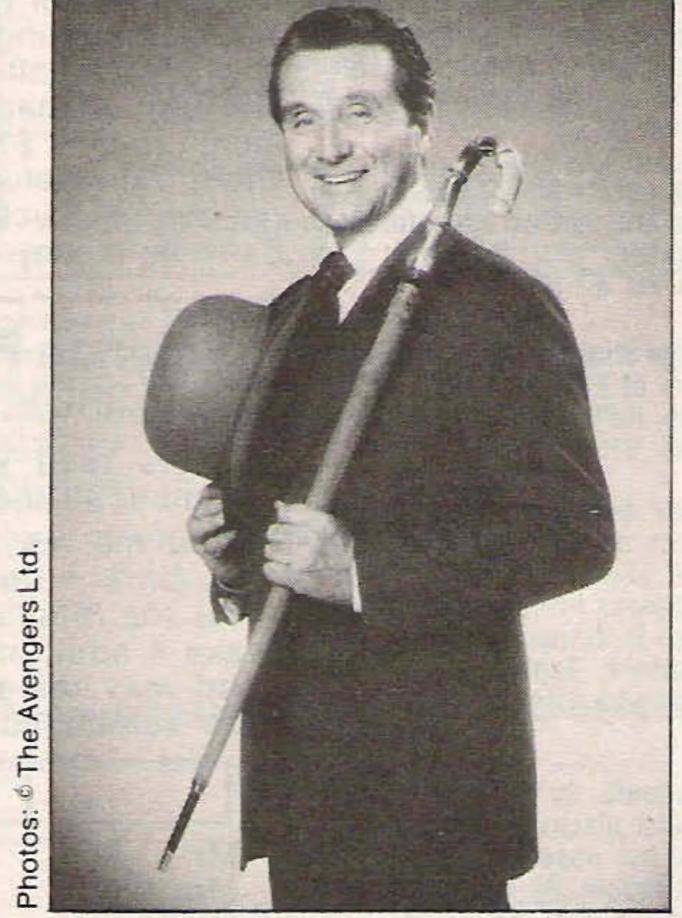


One of four SF/ fantasy posters penned by famed illustrator Esteban Maroto and sold by Heritage Press. The publishing company began as a hobby and blossomed into a prestige house, with an exciting line of quality books and posters.

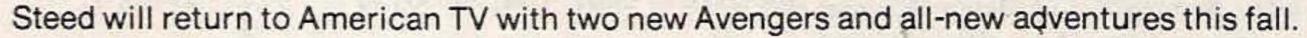
NEW AVENGERS DUE FOR FALL

This September will see the rebirth of a television legend. After almost a decade The Avengers will be back fighting invisible men, ghosts, cybernauts, and various villainous types. But these Avengers are not the duo you may have previously known and loved. Although Patrick Macnee as John Steed is returning with all of his aplomb intact, the nubile, leather-loving Diana Rigg as Emma Peel and daffy, buxom Linda Thorson as Tara King have made way for the stylish Joanna Lumley as Purdey, an ex-ballerina and karate fiend named after a popular brand of shotgun.

But that's not all, folks. For the first time, the espionage team has gained a third member. In this case it's Gareth Hunt as ex-race car driver and crack shot Michael Gambit, adding a little macho derring-do to the trio. Under the experienced and careful direction of producer Albert Fennell (The Innocents, The Legend of Hell House), writer Brian Clemens (The Golden Voyage Of Sinbad), and composer Laurie Johnson (Dr. Strangelove, First







Men In The Moon), this team will thrill science-fiction action fans this fall as The New Avengers.

According to English sources, who have already viwed two seasons of the series, Steed is every bit as sophisticated as ever, Gambit adds an inter-

esting dimension to the familiar formula and Purdey can kung-fu like nobody's business. Already they have taken on the televised like of vampires and ghouls—when they get to America, who knows? Close Encounters Of The Steed Kindanyone?

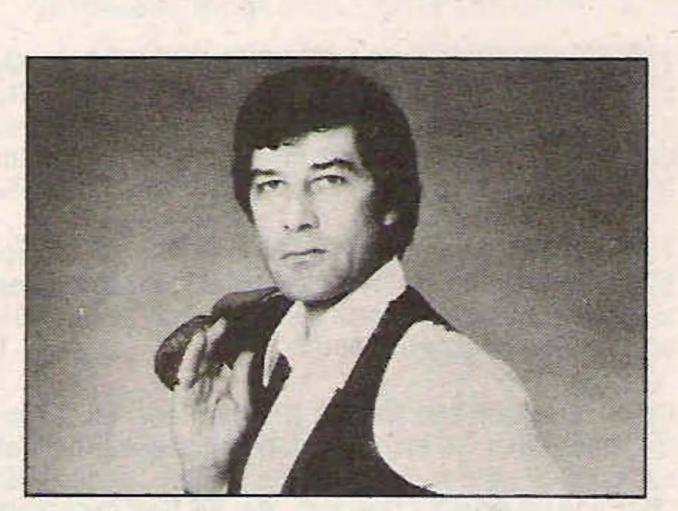
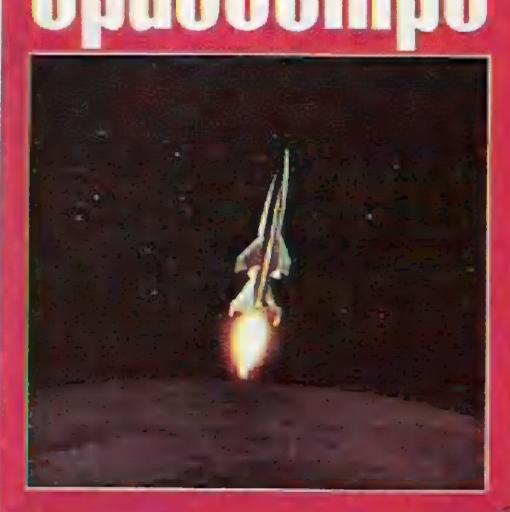


PHOTO GUIDEBOOKS

36 pgs. many in FULL COLOR! \$2.95

STATIBLE photo guidebook



STATUTE photo quidebook

many in

many in FULL COLORI \$5.95





- Quality high-gloss paper.
- Big 8½" x 11" format.
- Not available on newsstands.
- Each volume includes a collection of rare photos from movies and from TV shows.
- 32 pages of Full-Color photos and art.
- Valuable reference data, credits, etc. from all the SF shows.
- A "must" for every science-fiction library.
- The perfect gift for any SF fan.
- From the editors of STARLOG Magazine, the most popular science-fiction publication ever!

ORDER TODAY!!!

Please send the following:

SPACESHIPS @ \$2.95 ea.

Postage: 3rd Class-\$.75 ea. 1st Class-\$1.15 ea. Foreign Air Mail—\$2.05 ea. SF ALIENS @ \$5.95 ea.

Postage: 3rd Class-\$1.00 ea. 1st Class-\$1.40 ea. Foreign Air Mail-\$2.25 ea.

FANTASTIC WORLDS @ \$5.95 ea.

Postage: 3rd Class-\$1.00 ea. 1st Class-\$1.40 ea. Foreign Air Mail-\$2.25 ea.

ENCLOSED: S.

(cash, check or money order made out to STARLOG Magazine—including cost of Guidebook(s) plus postage fee for each copy)

NOTE: Send order on separate paper, if you don't want to cut out coupon.

Send to: STARLOG Guidebooks 475 Park Avenue South New York, NY 10016

NAME

ADDRESS

CITY

STATE

ZIP

Please allow 4 to 5 weeks for delivery of 3rd Class mail.

DEALERS: Write for wholesale rates on these, and future exciting releases from STARLOG Photo Guidebooks.

LORD OF THE RINGS FILM IN PROGRESS

After several decades of literary idolization, more than a dozen reprintings, several theatrical adaptations for the children's theater, a TV cartoon based on its prequel, *The Hobbit*, and several years of intense planning, *The Lord Of the Rings* is about to become a movie.

The production of J.R.R. Tolkien's epic trilogy, in any form, has never been easy. The good professor himself slaved for many years writing the three volumes and they languished just as long waiting for an industrious publishing house to discover them. Lord Of The Rings' road to screen immortalization was just as arduous.

For more than 15 years, its film production had never gone beyond the negotiation phase. In 1971 United Artists finally optioned the work along with the likes of *Man Of La Mancha* and *Hair*, taking a full page ad in *Variety* to announce their acquisitions. Of the three, only the first was destined for immediate creation.

At first, the studio proudly declared that Lord Of The Rings was to be one three-hour motion picture with John Boorman directing a live action cast. Fans and professionals alike reacted to this news with intense skepticism—one technician assigned to the project was quoted as saying, 'It's like filling Death Valley with Disneyland.'

Soon after, Boorman defected to Warner Brothers, making Deliverance and Zardoz in the process, and Lord of the Rings joined Hair on the U.A. shelf, until Ralph Bakshi convinced the company that he was the man for the monumental adaptation job (Hair was finally saved from the "dead files" at the same time by director Milos Forman).

"The prince of animation," as Disney Studios dubbed Bakshi, went right to work, setting his newly enlarged staff to the task. Now, two years and thousands of cels later, Bakshi and his producer, Saul Zaentz, are ready to unleash their version of the fantasy classic. STARLOG No. 10 detailed the work in progress while Bakshi dropped



enigmatic hints concerning a new animation process which resulted in a never-before achieved realism. "You won't believe what you're looking at!" he happily declared.

With the two-hour film set for a Thanksgiving release, the animation studio has finally seen fit to detail its technique. "Costumed actors are being used to film the entire movie in live action," a Bakshi spokesman said. "The individual frames of this film are then enlarged and used by the animators as guides for their drawings."

Was this the new breakthrough Bakshi saw the need to be coy about? Live-action footage has been used as reference in animation for years. The studio representative cleared up the point by explaining, "Having the entire movie at his disposal before it has been drawn gives Ralph Bakshi a freedom to choose and plan individual shots that no animation director has enjoyed before. Their use enables the animators to capture the most subtle nuances and details of each character's movements for heightened realism."

Though the director was in Spain at the time of this writing, overseeing a live-action attack on a castle for later animation, he recently professed pride in his achievement thus far, and said he hopes Lord Of The Rings will become what it deserves to become: a landmark in film fantasy.

TV: COMETS, HOBBITS AND DANCING DROIDS

Television is jumping headfirst into the realm of science-fiction/fantasy "special events" this year, envisioning an avalanche of eye-boggling episodes for 78-79. NBC has completed production on A Fire In The Sky, a three-hour disaster movie about the impending crash of a comet into the metropolis of Phoenix, Arizona. The drama, based on a story by the late Paul Gallico, stars Richard Crenna as Jason Voight, an astronomer whose warning of the coming horror goes unheeded until it is too late. Elizabeth Ashley portrays Sharon Allan, owner of the city's leading television station. Also on tap at NBC in the spring of '79 is Filmation's animat-

ed epic Flash Gordon, based on the classic comic strip hero, and a miniseries based on Aldous Huxley's Brave New World and The Martian Chronicles.

ABC is already planning on a block-buster for the fall of 1979, a two-hour fully animated holiday spectacular—
Frodo, The Hobbit II. This new mu(continued on page 14)

Two Magazines Designed For Everyone Who Looks Forward To Tomorrow!



Full-Color Photos!

Original Art!

Rare Movie Stills!

Interviews!

Science-Fiction News!

Behind-the-Scenes at Movies & Television!

Special Effects Explained!

Space Science Experts!

Exciting SF Events!

New Products!

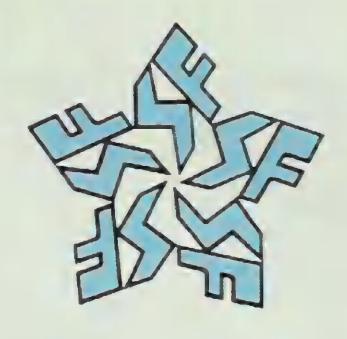
Visions of Tomorrow!



... All in These Two Top-Quality, 80-page, Glossy-Paper Magazines, Each Published 8 Times a Year (about 3 weeks apart).

SUBSCRIBE TODAY and start enjoying TOMORROW!

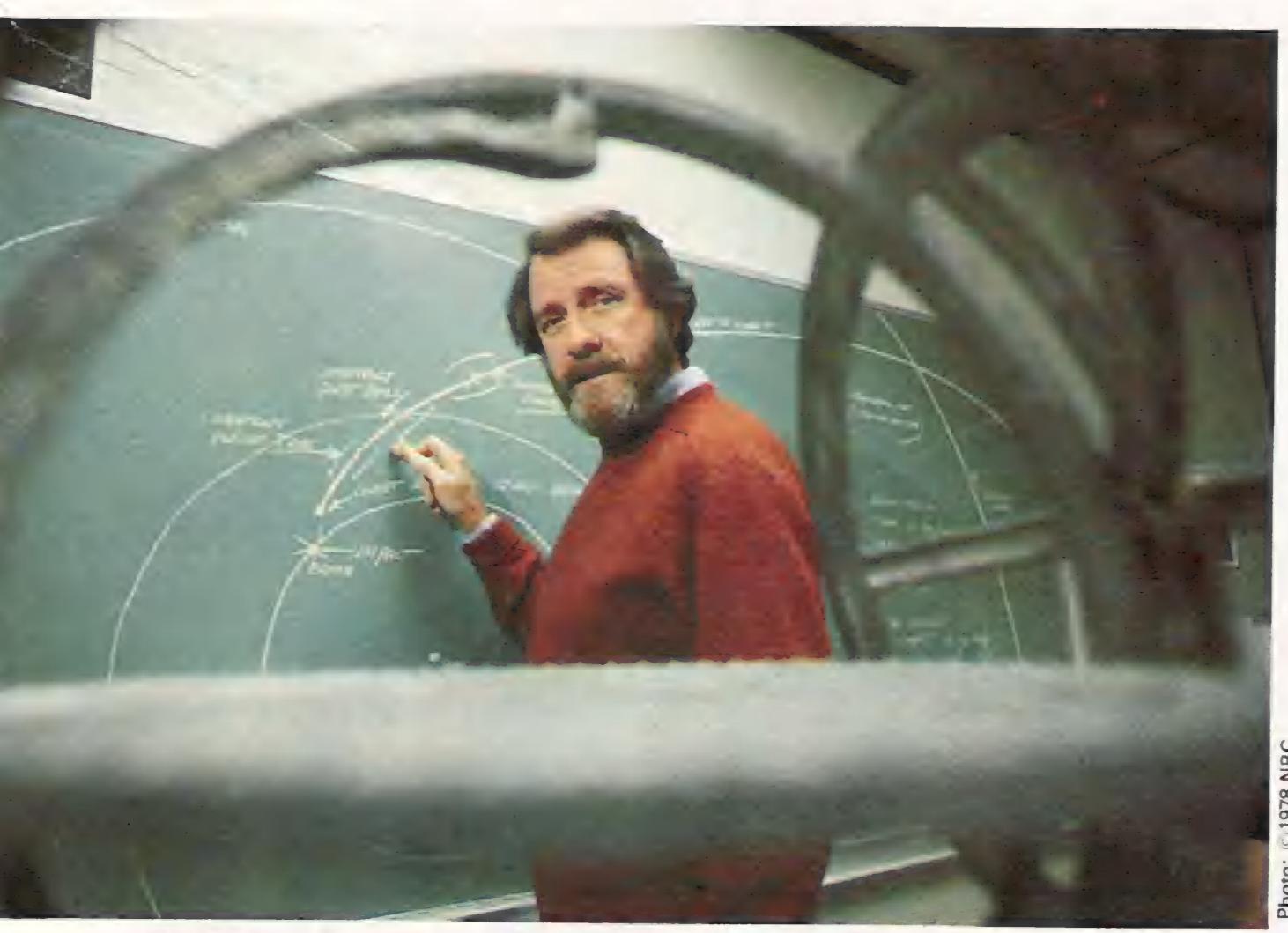
- "Civilization in Space," a Regular FUTURE Feature, Dramatizes the Problems and Values of Living Among the Stars
- Jesco von Puttkamer and Other Top Scientists Discuss Explorations, Discoveries & Innovations
- Publication Reviews, SF
 Graphics, & Hardware Reports
- Interviews: Fred Pohl, Arthur
 C. Clarke, Doug Trumbull and All the Great Visionaries of Science Fiction
- "Future Forum" Poses Questions for a Celebrity Roundtable



LAST CHANCE!!!

Because of mounting production costs, single copy and subscription prices to STARLOG and **FUTURE** will have a moderate increase starting with next issue. This is your last chance to subscribe at present rates. August 31, 1978 is the deadline, and all orders received after that date will be returned for additional funds. Send your order TODAY and save money on the two most exciting SF magazines in the universe!

Mail to: STARLOG/FUTURE Magazines 475 Park Avenue South New York, NY 10016	STARLOG (U.S. & Canada) 1-Year (8 issues) \$10.98 FUTURE (U.S. & Canada) 1-Year (8 issues) \$10.98 STARLOG (Foreign, surface) 1-Year (8 issues) \$17.00
Enclosed: \$'	Tear (8 issues) \$17.00 NOTE Foreign Air Mail_ add \$1.50 (Europe & South America) or \$4.50 (S.E. Asia, Africa, Japan) to Foreign surface rate Foreign subscriptions must include U.S. funds only
ADDRESS	
CITY STATE	ZIP



In NBC's forthcoming teleflick A Fire In The Sky, stalwart Richard Crenna stars as equally stalwart Jason Voight, an astronomer who warns the Earth about an upcoming collision between Terra and a runaway comet. His warnings go unheeded, however, and Phoenix, Arizona plays host to a very destructive intergalactic guest.

(Continued from page 12) sical adventure will be done by Rankin/Bass productions, the folks responsible for last year's colorful *The Hobbit* teleflick.

CBS is planning a horde of spectaculars including this fall's Star Wars Holiday Special, a one-hour opus still in the planning stages which promises to deliver both science fiction and song and dance. Also scheduled for the holiday season is a two-hour presentation from the Children's Television Workshop. The Chronicles Of Namia: The Lion, The Witch & The Wardrobe, a fantasy outing based on C.S. (Out Of The Silent Planet) Lewis' work. The network has also acquired the rights to the best seller Gnomes for a full-length animated production as well as TV rights to the animated film feature version of Richard Adams' Watership Down.

Watch for a special rundown of televised things to come in STARLOG No. 17 with in-depth coverage of such upcoming SF-ers as Battle Star "Galactica," The Hulk, Brave New World, Mork & Mindy, Flash Gordon and Buck Rogers!

NEW STARS ON THE HORIZON

This summer theaters across the country will play host to a horde of creatures from the *Sturs*. Unfortunately, Wookies, Jawas and Jedi Knights will not be invited. *Star Pilot* and *The Adventures Of Stella Star* are the latest offerings in the SF *Star*-anything avalanche.

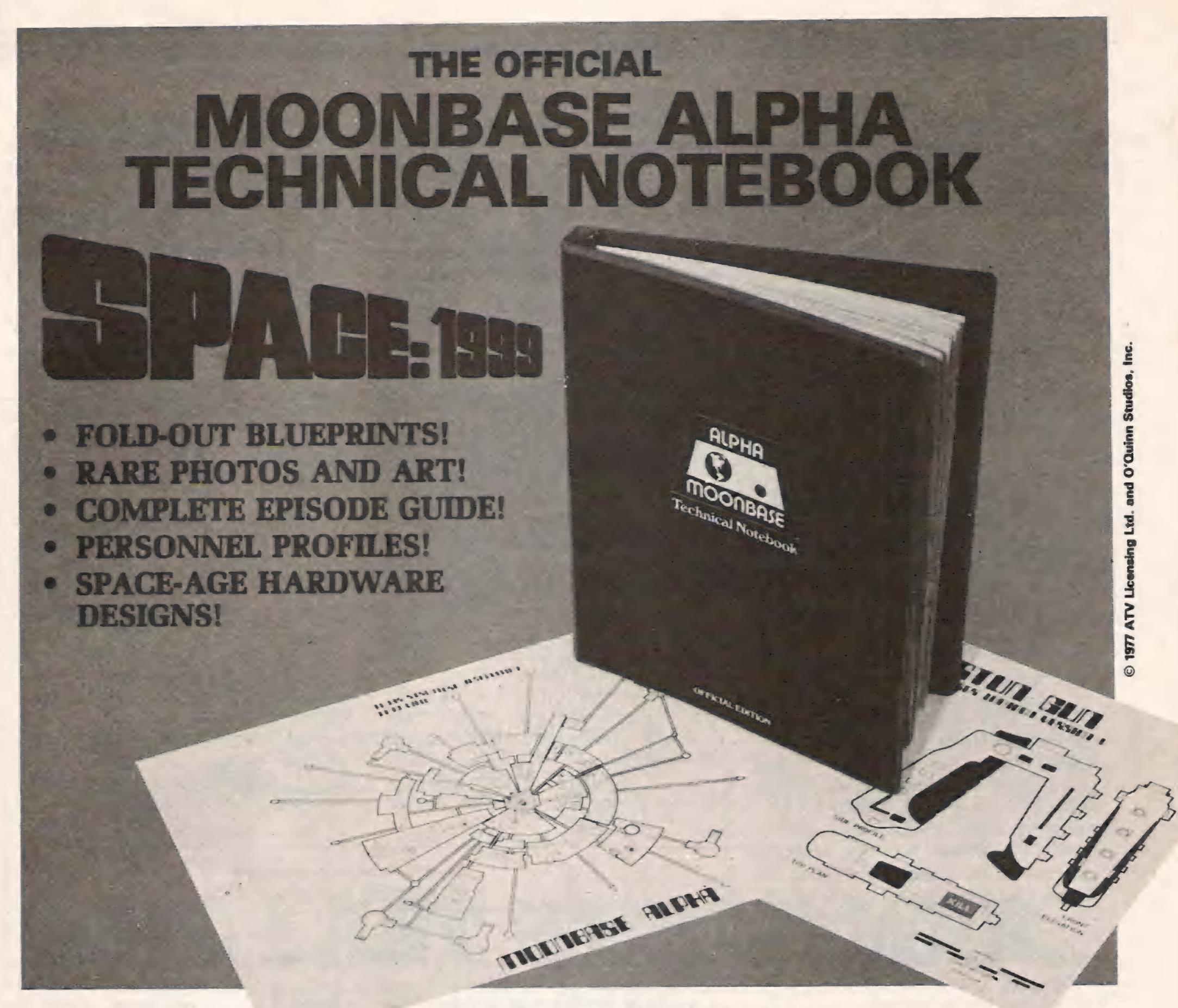
Star Pilot, which has already begun appearing in isolated areas, is an imported effort from Italy starring former Hercules grunt-and-groaners Kirk Morris and Gordon Mitchell. The ad copy reads: "They discovered new worlds, but they were not alone..."

Judging from the publicity stills, apparently they were accompanied by the ghost of Buck Rogers past. Female aliens wear black mesh tights and stalwart space travelers boast padded shoulders in uniforms straight out of Killer Kane's army.

Stella Star, on the other hand, is a slightly more ambitious production being released stateside by American International Pictures. Initially envisioned as a \$4 million-plus opus called Star Crash, Stella was shot in Rome and directed by Luigi Cozzi, under the pseudonym of Lewis Coates. Cozzi is aware that his film may be seen as a Star Wars rip-off but diligently states that Stella was planned nearly two

Two thurs from ourrespace aim their futuristic flashlights at unseen

Two thugs from outrespace aim their futuristic flashlights at unseen foes in Italian space opera The Adventures of Stella Star (formerly Star Crash).



A BLUEPRINT PACKAGE, CONCORDANCE & TECH MANUAL ALL IN ONE!

Here is the definitive guide to information from "Space: 1999." The OFFICIAL MOONBASE ALPHA TECHNICAL NOTEBOOK is a handsome, red vinyl, loose-leaf binder with gold silk-screened emblem on front and lettering on spine. The removable pages are organized in strict military fashion and include complete data on the Commlock, Stun Gun, Laser Cannon, Communications Post, Uniforms, and several fold-out blueprints of the various levels and areas of Moonbase Alpha. In addition there is a personnel section with photos and bios of Commander Koenig, Helena Russell, Victor

Bergman, Alan Carter, Tony, Maya, etc. There is also a complete Timeline and Episode Guide section with photos, credits, and plot synopses for all 48 TV adventures. Compiled under the supervision of the STARLOG editors, the NOTEBOOK is written by David Hirsch and drawn by Geoffrey Mandel, the technical team who developed the Eagle Blueprints for STARLOG No. 7. This limited edition publication (each one will be registered to the owner) is the one and only authorized version approved by Gerry Anderson Productions and ITC Entertainment.

1.2			
		0	
1		Ч	h
		V	U
-tr	olus j	osta	igel
ALL STATES			

Please send me _____copies of "THE OFFICIAL MOONBASE ALPHA TECHNICAL NOTEBOOK" at only \$9.95 each plus postage and handling fee.

Postage & Handling:
U.S.A. - \$2.00
CANADA - Parcel Post: \$2.50
FOREIGN - Parcel Post: \$3.50

NOTE: Postage rates were incorrectly quoted in previous ads and fliers. Above rates MUST BE INCLUDED with all orders!

Send to: STARLOG Magazine Alpha Tech Notebook 475 Park Ave. South—8th floor New York, NY 10016

NAME

ADDRESS

CITY

STATE

ZIP

TOTAL ENCLOSED: \$_____ which includes postage & handling fee.

ORDER TODAY

(Continued from page 14)

years ago when a test reel was filmed to interest financial backers. The original title, Empire Of The Stars, was replaced by Star Crash and then, Stella Star, at the request of AIP who recently released a modest thriller entitled Empire Of The Ants. Stressing the difference between Stella and Wars, Cozzi explained in a trade publication:

"Star Wars is real science fiction. Mine is science fantasy. The space elements in the George Lucas film are quite scientific. My film has many space elements but also includes dream people, monsters and lots of fantasy. Our heroes are a trio composed of an Amazon girl, a Robot and a humanoid from outer space—all search for a missing spaceship. Also, our galaxies have

nothing in common with Star Wars'."

Stella stars Marjo Gortner, Caroline Munro and Christopher Plummer with special effects handled by both Italian technicians and American supervisors. "Seventy percent of the film has been completed with optical processes," Cozzi states, "and the crew of specialists from America played a key role in the project."

WILSON'S BEASTLY BOOK

A strange spacecraft lands in the middle of a large city. Before authorities have a chance to react, a slithering mound of protoplasm makes its way down a gigantic landing ramp while muttering something in English. As people flee for their lives, the intergalactic globule declares solemnly: "One small step for a znargh—a giant stride for znarghkind."

The aforementioned bizarre scene is just one of the slightly out-of-focus visions collected in ghoulish cartoonist Gahan Wilson's latest book . . . And Then We'll Get Him (Marek, \$12.95 hardcover, \$4.95 paperback); his first collection of graveyard humor in eight years. For Wilson, who has achieved infamy via his grotesque pen and ink outings found within the pages of The Magazine Of Fantasy And Science Fiction, Playboy, The New Yorker and The National Lampoon, this carnivorous caucus represents his favorite works culled over the last decade.

Present and accounted for are such Wilson regulars as prune-faced spinsters, bumbling mad scientists, surreal aliens, equally surreal businessmen, man-eating plants, rebellious



elves, happy-go-lucky Nazis, psychopathic neighbors, disgruntled gods and a would-be suicide who wonders, gun poised at head, "On the other hand, if I'm dead, so what?"

Wilson, quite a normal looking mustachioed fellow during his noncartooning hours, attributes his unique outlook on the world and its inhabitants to a fairly traumatic childhood experience... his birth. Originally declared stillborn, young Gahan was revived by an old-fashioned doctor who tossed him into a bowl of icewater. "There must," theorizes the cartoonist, "have been brain damage."

A. ARNOLD GILLESPIE-SFX MASTER: 1889-1978

Last May the movie industry lost one of its true living legends, 79-year-old special effects wizard A. Arnold (Buddy) Gillespie. A 40-year veteran of MGM studios and a four-time Academy Award winner, Gillespie was often credited by MGM executives as being the originator of SFX as an "art form."

Originally an aspiring artist, Gillespie entered the movie industry almost by accident. After studying art at Columbia University and, later, the Art Students' League in New York, he got his first job at Metro studios in 1922 as an architectural draftsman. Working seven days a week for twelve hours a day, Gillespie found himself doing every job under the sun for a grand sum of \$25 per week. Since unions were

virtually unheard of in Hollywood's infant days, the youthful artist began trying his hand at every type of artistic function possible. Eventually, the craftsman began working on movie miniatures. From there, he expanded his terrain to include every type of special effect possible.

He won Oscars for his work on Ben Hur, Green Dolphin Street, 30 Seconds Over Tokyo and Plymouth Adventure. Among his better known ventures not awarded an Oscar were Forbidden Planet, Ben Hur (the original), Mutiny On The Bounty (both versions), and The Wizard Of Oz. He retired from MGM in 1965, a special effects technician on over 600 films and an art director for more than 300. Once asked to describe his craft, the consummate SFX designer remarked: "I think people in our profession are a combination

of engineer, inventor and dreamer."

A. Arnold Gillespie, whose dreams took audiences from Altair IV to ancient Rome, is dead at 79.

HULK WINS SPOT, SPIDERMAN IN WINGS

Not only has CBS-TV picked up The Incredible Hulk on a weekly basis for the fall season, but they have also arranged that the popular muscle-man retain his Friday at 9 o'clock spot. Not on the weekly fall roster, however, is fellow Marvel comic book hero Spider-Man. Apparently, network brass didn't feel the limited series shown this season had enough time to prove itself with viewers. But web-slinging fans need not fear for Spidey's future, CBS has ordered eight Spider-Man "specials" for airing in the fall.

HERRMANN'S MUSIC LIVES AGAIN

One of the most important elements in a motion picture success story is the musical score, and one of the most important composers in the history of the cinema was the late Bernard Herrmann. During his lifetime, he proved himself a master of evoking chills from his audiences via both his compositions for Alfred Hitchcock (North by Northwest, Vertigo, Psycho, The Man Who Knew Too Much) and his musical excursions into the unearthly (The Day The Earth Stood Still, Farenheit 451, Mysterious Island, The 7th Voyage Of Sinbad, Journey To The Center Of The Eurth). A year and a half after his death, Herrmann is still scaring moviegoers out of their wits in It Lives Aguin, a sequel to 1976's successful killer kiddiefest, It's Alive. Herrmann wrote the music for It's Alive a short time before his death, and It Lives Again is a hauntingly appropriate title for the sequel since Herrmann's Alive score has been newly re-orchestrated and re-recorded for this summer release. Happily, the plot of the new thriller closely resembles Alive's storyline (killer babies on the prowl), so



Herrman's musical genius aided Harryhausen magic in The 7th Voyage of Sinbad.

Herrmann's original musical moods fit like a glove . . . or diaper as the case may be. Writer-director-producer Larry Cohen is responsible for both films and made the decision to re-use Herrmann's murderous melodies himself. It was a labor of love for all concerned. "Laurie Johnson worked on the orchestration and conducting for nothing," Cohen informed STARLOG. "Any money that results from the music, like from a soundtrack album, will go to Herrmann's widow, who now lives in London."

THE LAST WORLD WAR.

Here's a special offer to Starlog readers—the completely new and original musical version of H.G. Wells' "War of the Worlds." This classic tale of Martian invasion is now available in an elaborate 48-track production from Columbia Records. Presented to you by an all-star cast," War of the Worlds" is narrated by RICH-ARD BURTON, with other worldly performances by JUSTIN HAYWARD, DAVID ESSEX, PHIL LYNOTT and

others. The double-album set also includes a lavishly illustrated 16-page, full-color booklet featuring complete script, lyrics, and eight magnificent illustrations.

To save C.O.D. charges just send your check or money order for \$11.98 (regular list price is \$13.98!) for each complete double-album, 8-track, or cassette. Just cut the coupon (or make your own) and mail to:

2-RECORD SET	
THE WAR OF THE WORLD Narrated by Richard Burton including: Forever Autumn/Thunder Child The Spirit Of Man/Brave New World	S

Justin Hayward appears courtesy of The Decca Record Company Limited.

Phil Lynott appears courtesy of Phonogram.

	Please rush r	ny "War of the World	ls".
	_albums	8-tracks	cassettes
Send C.O.D.		I enclose \$	
To: Name			
Address			
City	StateZip		
Country	Planet		•

IT HAS ITS FATHER'S EYES AND ITS MOTHER'S FANGS

This one feels different," said a very pregnant Sharon Farrell in the opening moments of 1974's It's Alive! That understatement of the year led to the birth of the Davis baby, a hearty little devil who immediately slaughtered all the doctors in the delivery room, then went on a rampage of crawling terror unparallelled in cinematic history. It's Alive proved to be a Warner Brothers success and the nation's most potent advertisement for Planned Parenthood yet.

Even with such a viable and unique concept, the movie was unsuccessful during its initial release but enormous success in Europe warranted a new distribution and publicity plan. With the aid of a clever commercial campaign, the film has since grossed over twenty-five million dollars. Thus, as naturally as mothers bear babies, Hollywood spawned a sequel: It Lives Again!

"The first film ended where another should begin," said Larry Cohen, the director/writer/producer of both killer kid pictures. "I had three and a half years to think about 'why didn't I say this?" or 'why don't I try these cinematic devices?" There was much more that needed to be said in the context of this theme."

This theme, sandwiched between healthy bouts of suspense and violence, is simple to Cohen's mind. "We're talking about the inevitability of evolution," he proclaimed. Not surprisingly, the prolific filmmaker's position is subject to the interpretation of his audience, who clamor for his horror films (God Told Me To, also known as Demon), the studios he works for, who like the money his other exploitation films bring in (Hell Up In Harlem), and even his actors.

John Ryan, who played Frank Davis, the mutation's father in the original version, concurs with Cohen's vision but also sees the films as spiritual dramas. "The lesson Davis has learned by fathering this monster is to confront the beast in himself," he explains. "Man is at a point where we are finally manifesting our evil. It may even come to a point where we will be so poisoned in our thinking that our very genes may become so corrupted that we would give birth to the very things we are."

This is the very thing that happens in It Lives Again. Except that instead of the one mutated monster the Davis' bore in the initial film, diaper clothed demons are springing up all over the country. The U.S. Government, ever the fashionable heavy these days, sets out to destroy the warped fetuses before birth



This clawed cutie is the Rick Baker-built baby for It's A-live! The 3 kids of It Lives Again were built from the same mold.

while Frank Davis sets out to save the beastly babes. The parallel to King Herod's slaughter in the Holy Land from the New Testament is both obvious and intended.

"The church loves pictures about the devil," Cohen stated. "Because by the very nature of his existence, there is God on the other side. But when you start dealing with the Lord, people get very touchy about it." Larry Cohen has seen to it that people get touchy about his movies for years.

It Lives Again, despite its other aspirations, remains a horror film first. According to its creator, it attempts to recreate the same thrills and chills as its predecessor. Aiding in that effect is makeup maestro Rick Baker, who made 3 mutant babies from the same mold that gave birth to the frightening first.

"I wanted to make each of them different," said he, "using different molds, but Larry said it would cost too much, so they were altered after being cast." The production's frugality extended to almost every aspect of special effects. But after a trying period working on *It's Alive*, Rick was not happy, but used to Cohen's short-cuts,

like making the baby "crawl" by pulling it across the floor with a rope. The method used in the baby's close-ups was a little closer to home however. "That's my wife in facial makeup!" Rick laughed.

Meantime Cohen contends that the lack of intricate detail has a place in his film duo. "I never liked the big monster films," he said. "What scares me is what I never see. Or what I expect or fear to see. When you see a thing clearly then it becomes a special effect. The more clearly the babies are shown, the less frightening they would have been."

What is clear is that It's Alive and its followup, It Lives Again, will be seen for some time to come. After the sequel has its initial run, the producer wants to run them as a double-feature. Cohen sees them as important to one another. After that? Both the films' star and backstage technician have their own answer.

"There will be a third film," said John Ryan. "There is much more to say. We need to see the fruits of this evolutionary course that's been set." Or, in the words of Rick Baker, "It'll be time for It's Alive Goes To College."

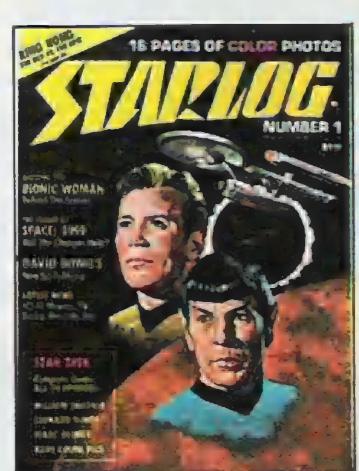
IMPORTANT NOTICE: CALL FOR LISTINGS IN SF MERCHANDISE GUIDE

STARLOG's Second Annual SF Merchandise Guide—the most comprehensive listing of science-fiction and movie shops, bookstores, mail order suppliers, manufacturers and dealers ever asembled—will be inserted free in every copy of STARLOG No. 18 (on sale October 24 . . . just two months before Christmas). The guide will be seen and saved by hundreds of

thousands of science-fiction fans and professionals—a fabulous opportunity to advertise your products and services to an eager audience, and make valuable business contacts in the SF field.

Deadline for all listings: Must be in our office by August 25, 1978—NO EXCEPTIONS! For complete information, rates and forms, RUSH your name, address and phone number to:

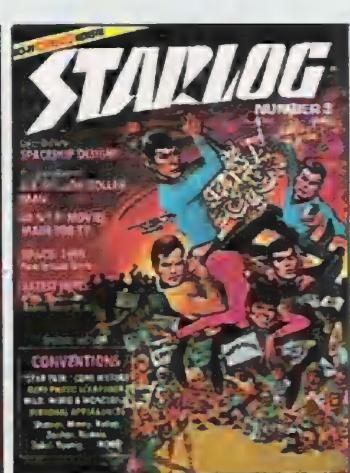
STARLOG Magazine SF Merchandise Guide 475 Park Avenue South New York, N.Y. 10016



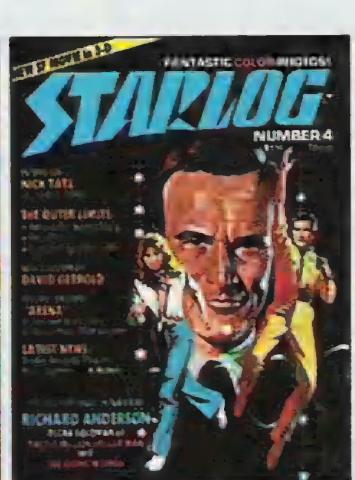
No. 1 —
"Star Trek" Rare Color Pics & Complete Episode Guide,
Shatner & Nimoy Articles



No. 2 —
"Space 1999" Year 1 Guide,
"War of the Worlds,"
"Logan's Run," The Comics



No. 3 —
"Star Trek" Convention,
Spaceships, "1999" Year 2
Guide, SFTV Movies Guide



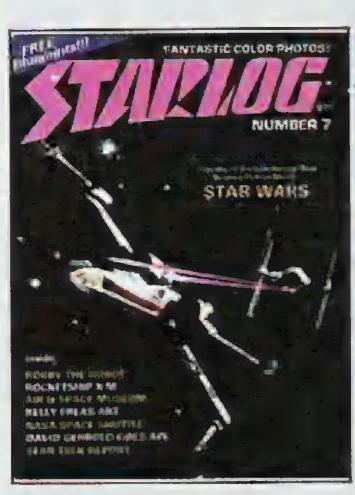
No. 4 —
"Outer Limits" TV Guide.
"Arena," Nick Tate Talka,
3-D Movies Filmography



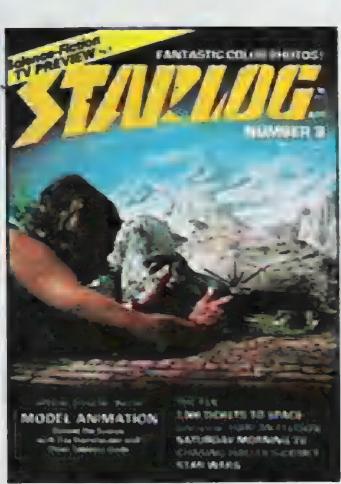
No. 5 —
3-D Part 2, "UFO" Guide,
"Star Trek" Censored, SFTV
Address Guide, Space Art



No. 6 —
"Fantastic Journey," "Star
Trek" Animated, Special
Effects—Part 1

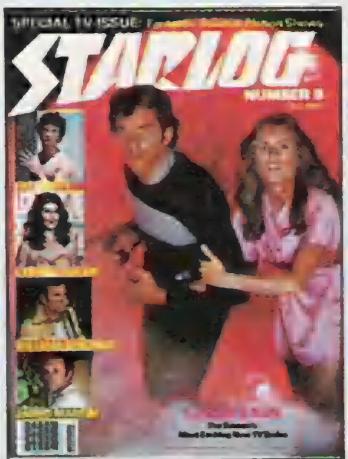


No. 7 —
"Star Wars," Robby the
Robot, Eagle Blueprints,
"Star Trek" Report



No.8

Model Animation, "The Fly,"
Harian Ellison Interview,
Set. A.M. TV, NASA Space Tix



No. 9—
Interviews: Pat Duffy, Lynda Carter, Shatner, Jared Martin, Fantastic Journey Guide, Star Wars, Sta TV SF.



No. 10—
Asimov, Close Encounters preview, SF-Rock, SF Merchandise Guide, Interviews: Harryhausen, Bakshi, George Pal.



No. 11—
The Prisoner, Computer Games,
The Superman movie, Incredible
Shrinking Man, SP FX: The
Makeup Men, SF Comics.



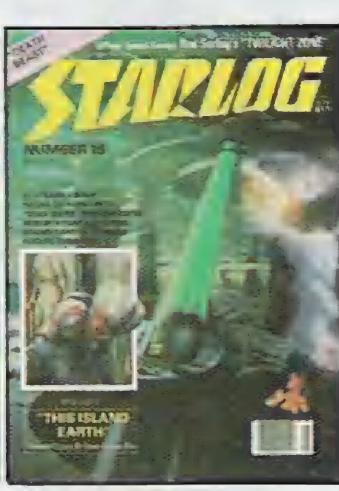
No. 12—
Close Encounters feature, Ster
Trek II, Computer Animation,
Leser Blest, Art by Bonestell, The
Makeup Men, cont.



No. 13—
Logan's Run Episode Guide, 3001,
Disney's Space Films, The Time
Machine, David Prowse—
Darth Vader



No. 14—
Virgil Finlay art, Jim Danforth interview. "Project UFO."
Capricorn One, Star Wars
P S Ellenshaw



No. 15—
This Island Earth, Episode Guide
"The Twilight Zone". Sound
Effects, David Gerrold:
"Death Beast", chap. 1

JUST LOOK WHAT YOU'VE MISSED!



Back Issues

Capricorn One, Star Wars P S Ellenshaw Effects, David Gerrold= "Death Beast", chap. 1

POSTAGE & HANDLING:

Back issue prices INCLUDE postage for regular 3rd Class delivery (4 to 6 weeks). For super-quick service, include your own self-addressed 9"x12" envelope stamped with 1st Class postage. American stamps only please. We will process these orders the same day they are received, and you should have them within 10 days.

1 magazine: add \$1.06 1st Class Postage 2 magazines: add \$1.84 1st Class Postage 3 magazines: add \$2.62 1st Class Postage (For MORE THAN 3 magazines, send TWO or more envelopes with appropriate 1st Class Postage on EACH. Incorrect postage will cause a delay in shipment.)

FOREIGN POSTAGE:

(For all countries other than U.S., Canada & Mexico. Above rates do not apply.)
Air Mail Rate: add \$1.70 per magazine

No. 2 - \$4.25 each
No. 3 - \$3.25 each
No. 4 - \$3.25 each
No. 5 - \$3.25 each
No. 6 - \$3.25 each
No. 7 - \$3.75 each
No. 8 - \$3.25 each
No. 9 - \$3.25 each
No. 10 - \$3.25 each
No. 11 - \$2.75 each
No. 12 - \$2.75 each
No. 13 - \$2.75 each
No. 14 - \$2.75 each

____ No. 15 - \$2.75 each

No. 1-\$5.25 each

Our stock is extremely limited, and when present supplies are sold out . . . that's it. Enclose cash, check, or money order.

ORDER TODAY!

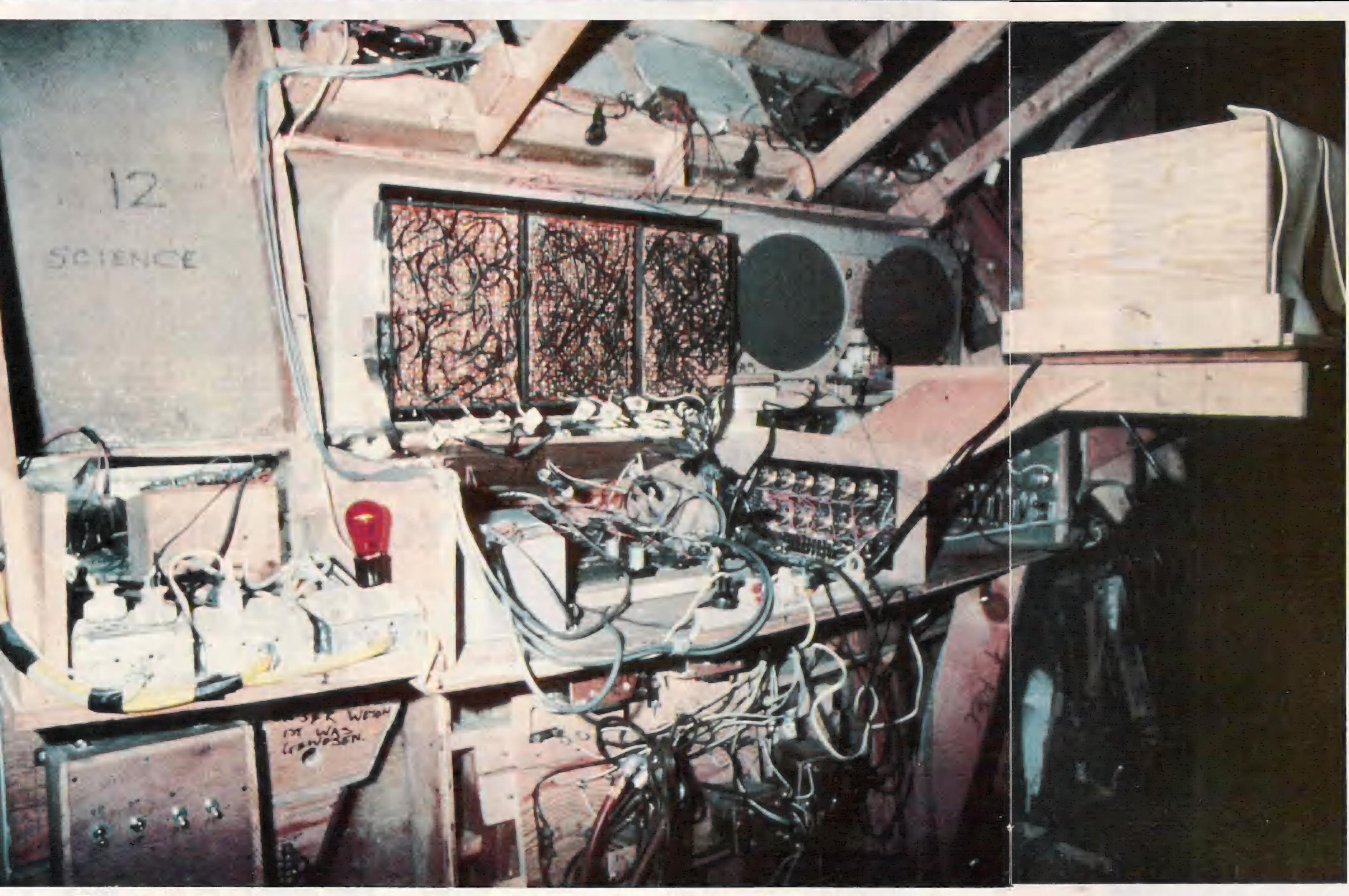
475 Park Avenue South, 8th Floor Suite, New York, N.Y. 10016

Name ______Address ______

City ______
State _____Zip____

Note: If you don't want to cut up this magazine, please print your order on a separate piece of paper:

TAR TREN REPORT



or all of you who have called our office recently asking to talk to Gene Roddenberry and were told that he was in a meeting (and that's just about all of you), I have some bad news. Our entire staff is in a meeting. Right now. As you read this. This is a recording.

With production still set to begin this summer, the crunch is being felt in all departments and Gene and Bob Wise, along with a number of members of our creative staff, can usually be found behind closed doors.

One of the first priorities was putting the final polish on the script. Harold Livingston, who originally teamed with Gene Roddenberry to write the script, returned to our offices to complete the final screenplay. His familiarity with STAR TREK and the script was indeed an asset to us.

The \$15 million budget announced earlier gave us more latitude in the area of art direction, and we have signed Harold Michaelson as our new art director. Harold's previous credits include Mame, Two People. Johnny Got

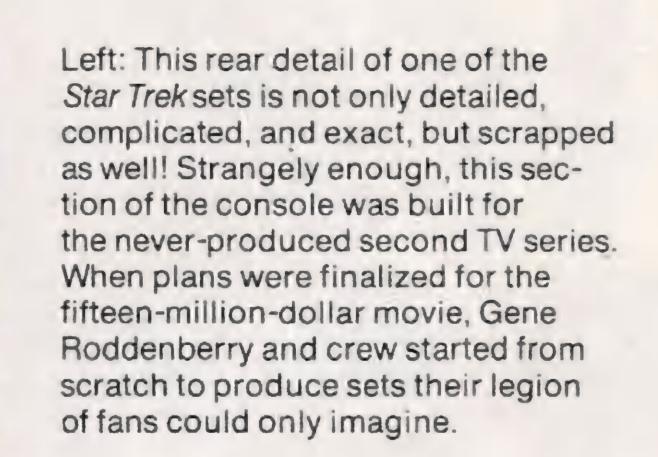
His Gun, and Catch-22. He is presently working on new designs for some areas of the Enterprise sets, including wider corridors, and we'll see parts of the Enterprise never seen before, adding to the big-screen look.

We've signed Phil Rawlins as Unit Production manager. He is responsible for coordinating the budget with all areas of the production. Phil's latest films include California Suite, Coma, The Heretic, First Love, and The Wind and the Lion. Phil also worked on the original STAR TREK television series

as first assistant director, and is delighted to be involved with the motion picture.

#14, I suggested that fans send any questions c/o this magazine and I would try to answer them. Little did I realize that I would receive so many, and I've had to begin a file just for these letters! One of the most frequently asked questions was "What about the new Vulcan character, Lt. Xon?"

Although Xon will not appear as a



character in the movie, he is still an interesting one and perhaps will be used at a later time in sequels or in some future return to television.

Douglas J. Zimmer of Spokane, Wash. asks, "Are there any plans for the rejected motion picture scripts for TREK II? A lot of people are curious to hear what Gene Roddenberry, John Black, Allan Scott and Chris Bryant had to say. Will we get a chance? And what about that plan to publish *The God Thing* through Bantam Books?"

There are presently no plans for publishing any of these scripts and story outlines. However, they will be covered in the book. 'The Making of STAR TREK—THE MOTION PICTURE,' which I am currently working on, and I hope to be able to present some of the story concepts of these along with some actual script pages, if possible. The book *The God Thing* is to be based on Gene Roddenberry's original script for the STAR TREK movie which was written back in 1975. Ban-

tam Books has given him an extension in completing this because of the production of the film, which is a full-time effort.

Darrell Montz of Anderson, Missouri would like to know if the sets will be constructed to the same specifications as in the Enterprise blueprints. While the Franz Joseph Blueprints (Ballantine Books, 1975) are remarkably well done, we have pointed out in the past that they were prepared entirely by the artist without guidance from Gene Roddenberry or Matt Jeffries, the original designer of the Enterprise, and do not necessarily represent our concepts. The new Enterprise sets were designed by our art department to best suit the needs of this motion picture, and were not based on Franz Joseph's designs. We had to consider such things as camera access, lighting the sets, mobility of actors, overall appearance, etc., all of which are vital in set construction.

Craig Melcher of Magicam revealed that Magicam will be building a brand new model of the Enterprise for the forthcoming film because the old "new" model (constructed last year for the proposed syndicated TV series) simply wasn't detailed enough for the widescreen opus. Also under construction will be a new Klingon vessel.

William Blair of Ft. Sill, Okla. wondered if Franz Joseph would be changing his designs accordingly, and also if Bjo Trimble would be updating the STAR TREK Concordance. We have no knowledge of any plans by Ballantine Books for revised editions of either of these. No doubt there will be many new books and novelty items developed when the motion picture reaches the theatres, but at this time the only book planned is "The Making of ..." mentioned above.

FAN CLUB NEWS: There is a new address for the William Shatner Fan Club. For all interested parties who wish to join Bill's new and official fan club, the address is:

William Shatner Fan Club c/o Lemli Music, Inc. P.O. Box 1710 Hollywood, CA 90028



The "Splinter in the Mind's Eye" is the title of both Foster's literary Star Wars sequel and this McQuarrie cover painting.

Art: Ralph McQuarrie, Courtesy Ballantine Books

Alan Dean Foster: SF's HOTTEST YOUNG WRITER

In 1970, Alan Dean Foster began his writing career with a tongue-in-cheek letter to an editor. Today the 31-year-old wunderkind traipses regularly through the literary realms populated by Star Trek's crew, Luke Skywalker and loyal minidrags.



By MICHAEL CASSUTT

reader today to name his or her favorite authors, chances are you'll get an avalanche of responses that are somewhat similar. Robert Heinlein, Arthur C. Clarke, Isaac Asimov, Frank Herbert and Ursula K. Le Guin will certainly be included within the litany of tried-and-true writers currently in favor with SF fans. And so will Alan Dean Foster.

At age 31, Alan Dean Foster is on his way to becoming one of the most widely-read writers of science fiction in the world. He's already a cause celebre in fandom because of both his half-dozen successful novels and his ten Star Trek Log books. His next two projects, however, are almost certain to catapult him into the brightest of literary spotlights, bringing his work to the attention of millions of additional readers and moviegoers alike.

Foster's most publicized new venture to date is his sequel novel to George Lucas' fantastically popular Star Wars.

Michael Cassutt is an Arizona-based freelance writer and disc jockey. He has just finished his first novel.

Foster's story, Splinter Of The Mind's Eye (Del Rey hardcover/paperback) is yet another chapter in the continuing adventures of Luke Skywalker and Princess Leia. The novel was developed by Foster in collaboration with Lucas and written by Foster.

Although Splinter is officially being tagged as being the sequel to Star Wars, it is not the story that is already in production for the film Star Wars II. That Skywalker opus originated in the typewriter of the late SF great Leigh Brackett. Although Foster has been out of the movie this time around, his Star Wars contract does allow Splinter to be filmed in the future, perhaps as one of the nine planned sequels to the original film. Foster has mixed feelings about that project." "As a professional," he begins, "naturally I'd like nothing better than to see it done as a film. But as a fan there are many things that are not present in the book that I would like to see present in a film.

"The reason for this is, when I worked on the outline for the book with George Lucas, Star Wars was still in production. George didn't know, no-body knew, that he was creating a social phenomenon, and not just another movie. So we sat down to consciously

design a book which could be filmable on a low budget. Now, George no longer has to worry about that.

"I'm not saying that my book wouldn't make a good film, but I'd like to see, for example, a whole fleet of Imperial cruisers instead of just one at a time. I'd like to see the Imperial home world and the Emporer's palace."

Whether or not Splinter Of The Mind's Eye makes it to the screen or not, Foster seems assured of a place in moviedom via his second current project. His original story "In Thy Image," once scheduled to be the two-hour premiere episode of the "new" Star Trek television series, is currently in production as the basis for the new Star Trek feature length film.

And so, barely out of his twenties, Alan Dean Foster is preparing to take the SF world by storm. Oddly enough, however, his phenomenally successful career started out as a goof. "It all happened by accident," he reveals.

Born in New York City, Foster grew up in Los Angeles and went to UCLA intending to become a lawyer. "I was that second-most-crippled college bastard," he smiles, "a political science major. (The worse, he who majors in English.)" But he got detoured. During

his senior year he decided to take a graduate course in screenwriting before going on to law school. "Much to the despair of my family," he says. He was accepted, had a wonderful time writing stories and watching movies, then decided to take on Hollywood. "I was going to be the next Orson Welles. I immediately wrote about fourteen scripts 'on spec,' which means someone promises you half of Los Angeles and all the money in the world when the movie is made. And the film never gets made, and you never wind up with the price of a cup of coffee. I never did, out of any of those fourteen scripts."

Foster's father was a science-fiction reader and naturally young Alan delved into the books he found around the house. He also had an earlier close encounter with comic books (he's still particularly fond of those written and drawn by Carl Barks), but never tried writing fantasy or science fiction seriously until 1970. He had discovered the stories of that master of horror H.P. Lovecraft and sent a tongue-in-cheek letter to the late August Derleth, a talented writer and poet whose one-man publishing company, Arkham House, was the first (and for many years the only) company to put Lovecraft into print. Derleth offered to publish Foster's letter in a little magazine called The Arkham Sampler. He paid Foster \$40, and that was his first professional sale.

When a second story sold to the prestigious Analog, Foster decided to try writing a novel. He did, and sent it off to John W. Campbell, the editor of Analog, "he being one of the few people who had not rejected everything I had sent in." Campbell returned the novel with eight pages of suggestions and criticism (a common practice with this great editor) and Foster re-wrote the book and sent it back to Campbell just before being hauled off to the Army's "misnamed Fort Bliss" for active duty.

"When I got my first leave I went home and found a package waiting for me. It was my novel manuscript. Campbell said, 'I think you've got a pretty good yarn here. It's definitely saleable ... unfortunately, we're purchased up on novels for the next year and a half."" Analog published novels by such writers as Poul Anderson, Gordon R. Dickson, and Harry Harrison as three-part serials. It was, to put it mildly, a tough market to crack, especially for a new writer. Foster says, "So I had the option of hanging onto it for a year and a half, and resubmitting it to Campbell at a future date, or sending it to somebody else. I sent it to Doubleday, Doubleday rejected it with a written letter. I sent it to Ballantine Books, Betty Ballantine bought it. The book was The Tar-Aiym Krang, my first novel." It was the first book in what later became a trilogy about its hero, an orphan named Pip, and his faithful companion Flinx the minidrag.

Only then did Foster consider trying to write for a living. "I figured, well, one-for-one, let's ride the roulette wheel as long as it spins." But it was three years before he could make the transition to full-time writer of science fiction. "I wrote public relations for a couple of years. You have no idea how dull writing can be until you have to think up a new way to describe prime rib every two weeks." He escaped from the drudgery of PR into a position at L.A. City College, where he taught film history and writing. He also lectured on writing and the works of H. P. Lovecraft at UCLA. He was writing all this time, selling books and stories in his spare hours, and wonder of wonders, he began getting assignments. He began doing "novelizations" of scripts from movies like Dark Star and Luana. Suddenly, by "accident," Alan Dean Foster was a full-time professional writer of science fiction.

There was another accident. "Ballantine had bought the rights to do the animated version of *Star Trek* and didn't

"Well, we are all travel writers, in a sense. We just write travelogues to places we just can't travel to—yet..."

know what to do with them. I had gotten a reputation as somebody who knew how to adapt screenplays, and they told me, 'Adapt them any way you want.'

"I hadn't read any of the Jim Blish adaptations (of the original Stark Trek scripts) and I looked at the animated scripts, which were twenty-minute cartoon scripts, and I said, well, I can't get a book out of each of these. But I didn't want to put eight or nine scripts in a book, because that would fill two books and that would be the end of the series. So I ended up putting three stories in a book." Even so, through the first six Star Trek Log books, he was forced to add scenes and background material—to write his own Star Trek stories. The practice came in handy since the last four Log books were indeed based on single scripts. It wasn't a real problem for Foster, though. "I like to add as much as I can to novelizations, because I feel if all you do is change the structure of a story from sceenplay format to prose format—in other words, change camera directions to complete sentences—you're cheating the reader. You should get something extra for your money. If you want the movie, go see the movie. If you just want a written record of the movie, take a tape recorder."

The success of the Star Trek books lead to an invitation from Gene Roddenberry and the producers of the new Star Trek series for Foster to submit a story, which he did. Through a series of decisions probably known only to Paramount Television, Foster's story, as of the latest reports, will be the basis for the Star Trek movie. Thus Alan Dean Foster has succeeded where writers like Robert Silverberg, Allen Bryant and Chris Scott, and even Gene Roddenberry himself did not: Foster has written the Star Trek movie.

He has no illusions about his fortune, however. "Several other people—mostly associate producers—have worked on the script, so I don't have high hopes for seeing my treatment faithfully transferred to the screen. I'm hoping enough will survive so that it's recognizable. Who knows, they may decide to do the whole thing as a Western next week." In fact, Foster is generally pessimistic about the whole Hollywood experience—people, he says, "to whom science fiction means giant cockroaches.

"They pay ridiculous amounts of money for ridiculously simple writing. And you'd have an easier time selling a novel you've written in Spanish to a Spanish publisher than you would trying to crack Hollywood.

"It can be done, but you sacrifice a certain part of your humanity." Most people who make movies, he says, "live in such a small, specialized environment. They all want to make the cover of *People* magazine. They forget they're going to be buried in the same dirt as everyone else."

Foster did enjoy working with George Lucas and the crew of Star Wars however, because of their atypical approach. "All the Star Wars people were non-Hollywood. George Lucas lives up in San Francisco. He's the last person you'd pick to be a major motion-picture director. He's a quiet, unassuming gentleman."

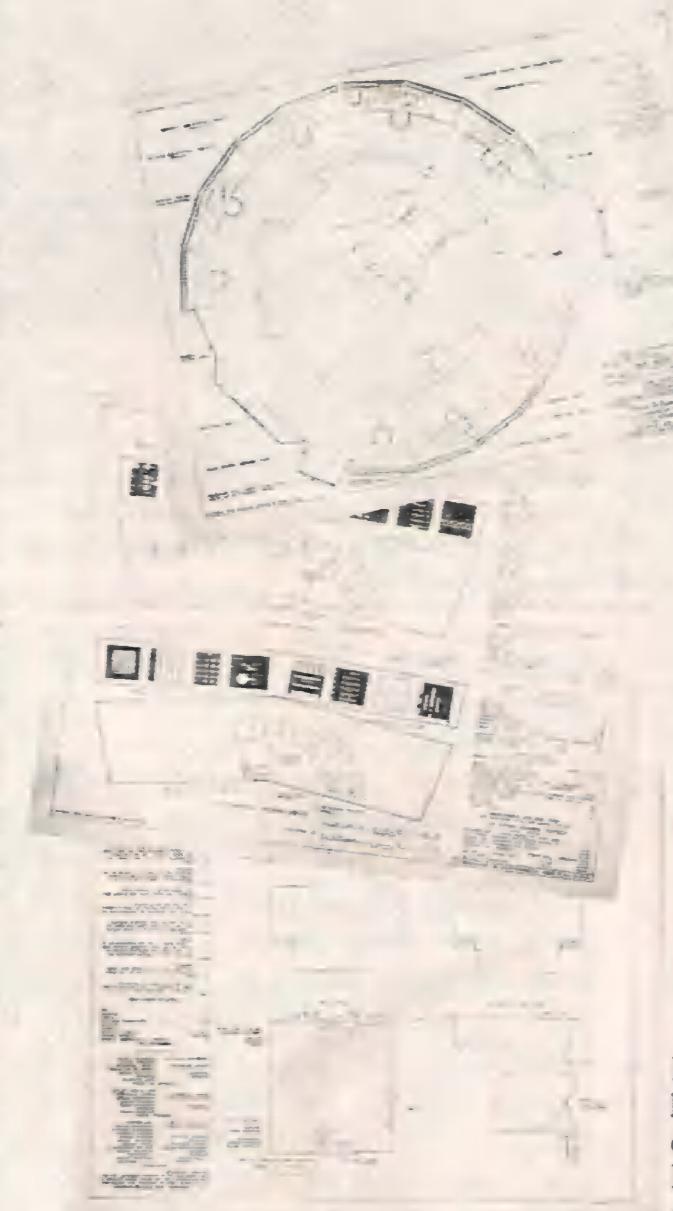
Last year Foster and his wife JoAnn left L.A. for Big Bear Lake, a hundred miles from Hollywood and giant cockroach lovers. Foster finds Big Bear a much healthier environment and is working steadily, writing from one in the afternoon to early evening, taking a break only to watch MGM cartoons on TV around dinner. How quickly he gets back to work depends only on "whether or not there are some Chuck Jones or Bob Clampett cartoons on afterwards."

He characterizes himself as "a very fast, very lazy writer. If I wanted to write nine to five, five days a week, I could turn out a book every ten days to two weeks." But he doesn't. Able to work, he insists, on only one project at a time, he'll spend anywhere from six weeks to two months on a book, with an

U.S.S. ENTERPRISE BRIDGE BLUEPRINTS

Here it is . . .

The Original Detailed Set — Complete on 10 Fold-Out Sheets, Each 22¾" x 16¾" — Drawn by Michael McMaster



THIS SET INCLUDES:

Helmsman and Navigation Stations

Main Bridge Layout (Elevations and Overview)

Communications Panels

Engineering Checkout, Defense Monitor and Weapons Panels

Commanding Officer's Station

Main View Screen Displays

MUCH MORE!!!

For the first time, you'll see plans for every button, every switch, every instrument, and every station from STAR TREK's famous Enterprise Bridge, and you'll discover the exact functions of everything shown.

Send today!!!

only \$6.95 for the complete 10-sheet packet



STARLOG Magazine
Bridge Blueprints
475 Park Ave. South
8th floor
New York, NY 10016

BRIDGE BLUEPRINTS Set(s) \$6.95 each plus postage

POSTAGE: 3rd Class—add \$1.05 per set 1st Class—add \$1.55 per set

TOTAL ENCLOSED: \$

(Send cash, check, or money order to STARLOG Magazine.)

NAME

ADDRESS

CITY

STATE ZIP

(Don't want to cut up this page? Send order on another piece of paper.)



SHARP!

Yes, that's what everyone said at the latest convention when they saw our NEW Official STARLOG Spaceshirt. You see, we returned to our original "eclipse" design (the symbol of STARLOG), but we created new artwork, a new printing process and a higher-quality 100% cotton T-Shirt. The result is the sharpest look when you're in the mood for the most fun! The STAR—LOG logo is bright orange, the corona is bright white and the Spaceshirt background is jet black. Order yours today... and stay sharp kid!

Only \$5.95 (plus postage)

(If you don't want to cut ou another piece of paper!)	at coupon, send order on		
Send to: STARLOG Spaceshirt 475 Park Ave. South New York, NY 10016			
3 Sizes Available! Be sure to pick the one that's right for you!			
QUANTITY:	POSTAGE: 55c per shirt		
SIZE:	ENCLOSED:		
S M DL	\$		
NAME			
ADDRESS			
CITY			
STATE	ZIP		

By MICK GARRIS

hy do we always expect them to come in metal ships?" queries Phillip Kaufman, director of the upcoming remake of The Invasion Of The Body Snatchers, about other-wordly invaders. It's a fair question in this time of alien scientists who spout eclectic mathematical jargon as they prepare for the jump to hyperspace, flicking switches and computing binary research to pinpoint target coordinates. Invasion Of The Body Snatchers, as the vociferous fans of Don Siegel's 1956 classic will agree, is a science-fiction horse of a different shade of green.

"This invasion is an organic invasion," Kaufman says of his film, currently being assembled in Hollywood and San Francisco. "It is the opposite, really, of Close Encounters Of The Third Kind in many ways. It's terrifying, not cute. And not friendly. It is whatever organic is, and whatever survival means."

For those unfamiliar with the original film, it deals with the take-over of a city (Santa Mira, California, in the original, San Francisco in the new version) by a strange form of plant-life from "out there." These extraordinary examples of galactic fauna have one remarkable characteristic: they sprout giant seed pods, which form clone bodies from the nearby residents and, as they sleep, replace them mind and body with soulless, emotionless doubles. This creates a frightening plague of insidiously alien humans, a theme represented since by paranoiac parables like Night Of The Living Dead, Shivers, and Rabid. The theme of the ever-encroaching tide of evil is a potent one, and director Kaufman and producer Robert Solo felt the time was right to adapt this powerful, twenty-year-old tale for the seventies.

The fact that remakes are often produced under questionable circumstances, artistically speaking, was not lost on the filmmakers. "I had to think quite a lot about the way I wanted to be involved in what I felt was one of the best science-fiction films I'd ever seen, in terms of doing a remake," Kaufman attests. "Generally, I'm very suspicious of remakes, but as I thought about it more, I realized that it was a chance not to do a remake, but to do, really, another version of that theme of The Body Snatchers. Although our film has certain structural similarities, it is really quite different from the original—more of a science-fiction film. In the original the science-fiction part was just sort of thrown in; the explanation as they looked at the pod was, 'Could it have been that creatures from outer space have arrived here?' We have handled this much more carefully. It is still a horror film, but we have made it much more a science-fiction film."

Re-Invasion of the Body Snatchers

An Interview with Director Phillip Kaufman



Above: Young director Phillip Kaufman takes a bead on the set action of the remake/continuation/elaboration for *Invasion of the Body Snatchers*. Right: One of the things he saw through the camera—a police sanctioned pod attack on Ca.!

Phillip Kaufman, whose directional credits include The Great Northfield Minnesota Raid and The White Dawn, brings the necessary integrity to an otherwise doubtful project: the integrity of a talented, knowledgeable filmmaker who, though he has not produced a financially successful feature, has total artistic freedom with this project. And the fact that Kevin McCarthy and Don Siegel, respectively the star and director of the 1956 film, both appear in cameo roles in the 1978 version is as strong an endorsement as could be hoped for.

The new Invasion is shrouded in a nearly impenetrable cloak of secrecy; STARLOG's talk with Kaufman is the only interview he has given to date. Though the original Body Snatchers was virtually devoid of optical effects, they will play a role in the remake, albeit a minor one. According to Kaufman, "It's not a big special effects movie; it's more involved with characters and a story. There are not, really, elaborate special effects. We don't want to talk about them because we don't want people to say, 'I read this article, and I know what changes were made, so I don't have to see the picture.' We don't have weird chandeliers descending from the heavens, and so forth. We have organic effects that happen within the movie. We've done some of those from the original, and more—optical effects,

special work. We've worked on the pods-in-the-greenhouse effect, too, but we've done it differently. That is one of the things we're keeping under wraps.

"We're not talking about the ending. I think we've taken some very bold liberties with the original story, and we have a lot of surprises. The ending is a total surprise. Many of the people who worked on the film do not know the ending to this day. Only the people involved in the shooting of the ending know it. The set was cleared, and everyone was sworn to secrecy. One of the members of the crew, I learned, was offering \$100 to find out how the film does end. There are a number of differences in this film, and a number of things that are currently relevant—especially to people who are into science fiction. I hope it is an improvement over the original, though I respect that film in all ways."

Since its original release in 1956 many people have felt that the symbolism of Invasion Of The Body Snatchers went beyond the superficial message. Many even saw the tale as an allegorical treatment of the feared "red tide:" the enveloping reach of heartless, godless communism into this land where "we" were the only ones with any feelings. Both Phil Kaufman and Don Siegel, whom Kaufman consulted about this, minimize the accuracy of that interpre-



tation. According to Kaufman, "if there is an allegory to this film, it is that we are in danger of losing our humanity and our feeling. There is a line from the film, as there was in the original, 'They're here! They're already here!' I hope that people will leave this movie feeling that we are in a civilization where there are a lot of unfeeling people, a lot of alien and strange things. It does validate paranoia. Tragedy is a highly elevating thing; it stirs you deeply. Fear can be a healthy thing, and the dramatization of fear can be good. Paranoia is really only a bad thing when there is no basis for it."

Feeling that the near film noir quality of the original black-and-white production was one of the picture's primary assets, Kaufman, with his cinematographer Michael Chapman (White Dawn, Taxi Driver), set out to utilize shadows and the explicit contrast of light and dark to recreate the proper atmosphere. "But you know," Kaufman contends, "the eye goes to colors. I feel that this color film has another dimension that the original didn't have, in terms of reality."

Another asset of the 1956 production was the high level of acting. Kevin McCarthy, in particular, is an intense and talented performer, respectful of a role that others may have disdained. Director Kaufman feels fortunate to

have been blessed with an equally talented group of performers, including Donald Sutherland (his first American feature in years), Leonard Nimoy, Veronica Cartwright (The Birds, Goin' South), Jeff Goldblum (Nashville, Next Stop Greenwich Village), and Brooke Adams (mostly featured on TV).

Though this film is Phillip Kaufman's first foray into the nether world of speculative film fiction, it was supposed to be his second. Kaufman was to be the director of the on-again-off-again Star Trek feature film. The Star Trek story, classic example of illogical corporate foolishness, certainly wreaked havoc in the life of Phil Kaufman.

"I personally have a certain bitterness about not having done Star Trek," he sighs. "I thought it was a fabulous project. At that point, as everyone knows, there was a couple of years of announcing that the Star Trek feature was being made, then not having the picture. At first, Paramount wanted to do a small, three-million-dollar rip-off, cashing in on the phenomenon. In the six or eight months that I was involved, it was raised to ten million. Executive producer Jerry Isenberg and myself said 'You just don't know how big Star Wars is going to be.' Jerry, in fact, had written a memo to somebody stating that Star Wars was going to be in the neighborhood of Jaws. They thought

that was so preposterous...

"We were ready to shoot. We had Ralph McQuarrie, who was living in London, working with Ken Adam, designing planets and everything. I was ready to move with my family to London in a couple weeks. They gave us a definite go-ahead, and then, one week later, 'Forget it.'

"I hope that, for the fans, the movie comes out and that it is a good movie. It could still be a grand-project."

Despite the bitter taste left in his mouth due to his almost-involvement with Star Trek, Kaufman's attention is centered on the future. His devotion to The Invasion Of The Body Snatchers borders on the monomaniacal. Certainly his concern is to prove wrong the doomsayers who claim that you can't remake a classic. Such is the director's enthusiasm for the project that all of the principal actors signed to do the film without even having read the script. They're committed to the film, according to Kaufman, after endless hours of conversation about it. "They did contribute to their own characters and to the scrpt in many significant ways. It was a very organic thing."

As with any picture, the major problem is going to be in selling it to the mass market. In a commercial sense, there are a couple of obstacles unique to this film.

(continued on page 74)



Bert I. Gordon behind the camera doing what he loves to do best... making movies. Gordon's phenomenal filmmaking career actually started off as a hobby.

By ED NAHA

ert I. Gordon makes monsters for a living.
Big ones.

Small ones.

Fire-breathing ones.

For the past twenty-five years, he has manufactured such aberrations as one-eyed giants, tank-sized grass-hoppers, twenty-five foot spiders, twelve-inch tall humans, two-headed dragons, titanic twisting teens and elephantine ants. For Bert I. Gordon, the creation of such freaks of nature is all in a day's work. Gordon is a motion picture producer, one of the last creature feature fanatics.

"I see myself as being a total film-maker," Gordon says cheerfully from his California studio office. "I can make any kind of film I have a feeling for. If I'm fascinated by a subject, I just go into it."

Fortunately for science-fiction and horror film fans of the fifties, the object of Gordon's fascination during that traumatic era was fantastic cinema. Arriving in Hollywood at a time when practically the *only* way a director was allowed to delve into SF was via a shoestring budget, Gordon soon

became one of the acknowledged members of the ever popular "B" movie—the type of film the critics ignored but the public clamored for. Between 1955 and 1960, he produced nine popular motion pictures, most dealing with SF-fantasy and all of them featuring wayout special effects.

Toiling innocuously behind some of Hollywood's more sedate studio walls, Gordon brought forth space-aged dinosaurs (King Dinosaur), a race of mad giants (The Cyclops, The Amazing Colossal Man, The War Of The Colossal Beast), an army of doll-sized humans (Attack Of The Puppet People), a litany of atomic mutations (The Spider, The Beginning Of The End) and time traveling genies (The Boy And The Pirates) in record time.

By the decade's close, Gordon had become well known in the business as a triple-threat man. A respected director, Gordon also handled all the special effects in his films, often wrote the scripts and, eventually, wound up producing his own projects as well.

Today, Gordon is as kinetic as ever, hard at work on a new project, *Devil Fish*. In his early fifties, the still-boyish producer-director happily admits to being the cinematic victim of a long-term

love affair with screen fantasy. "I have done other films that were not science fiction and fantasy," he confesses sheepishly. "But one of my strongest loves is the imaginative film."

The SF jack-of-all-trades was first bitten by the film bug while in his preteen years in Kinosha, Wisconsin. "I started fooling around with photography when I was nine or ten years old," he recalls. "My aunt gave me an old 16mm camera and I started making little movies that had plots and a lot of visual effects: ghost effects, people disappearing and then reappearing. It was always my ambition to make films."

Gordon continued making home movies until graduating college—when he began to take moviedom seriously, turning out both local TV commercials and industrial films. After mastering quite a few tricks of the trade, young Gordon decided to journey to Hollywood to seek fame and fortune. Surprisingly enough, neither was too long in coming. Gordon's professional ace-in-the-hole turned out to be his home movie experience.

"While shooting those home films and industrial productions," he reveals, "I just seemed to get more and more fascinated with the camera. I worked out different methods of accomplishing effects involving miniature people and giants and so forth. When I came out to Hollywood I discovered that some of my methods were similar to Hollywood's but many of mine were simpler and more economical, although quite effective. I never would have been able to make any of my movies if I hadn't discovered my own processes, accomplishing good effects cheaply."

Word got out about Gordon's technical expertise and, soon, he found himself helming his first production, King Dinosaur. "I had been in Hollywood about a year," he marvels. "I had been a production supervisor on the Racket Squad TV show. I was approached by a man who had a little bit of money and who was aware of my various skills. King Dinosaur was the result."

The film dealt with the plight of a group of astronauts marooned on the planet Nova, a delightful world populated by gigantic lizards, euphemistically known as "dinosaurs" in the script. "It was a very, very cheap film." Gordon laughs. "Prehistoric in a number of ways. But it was very suc-

BERTGORDON'S CREATURE TERMINATIONS

At the age of ten, movie-maker Bert I. Gordon made his first fantasy film. Four decades later, he's still at it, bringing forth armies of giant insects, rats and sharks. From The Spider to Food Of The Gods, Mr. B.I.G. has proven to be a monster's best friend.

cessful. After its release, there were several financial groups ready to invest in a film of my own design."

At that point, Hollywood was involved in an all-out battle with the then fledgling television empire for supremacy over the teenage viewing market. Directors, already hampered by low budgets and short shooting schedules, were instructed to come up with film projects that were sure winners. Period. While many veterans winced at the increased front-office pressure, Gordon relished the challenge. The concept of making good "little" movies was an idea that captivated him.

Concocting a script about a young girl searching for her lost lover in a barren jungle terrain, he began filming *The Cyclops*. The title character, as he envisioned it, would be the lost boy friend horribly scarred from a plane crash and transformed into a giant by radioactivity. Faced with the prospect of shooting a lot of "giant" special effects on a less than Olympian budget, Gordon came up with an economical solution that was quite typical of his back-against-the-wall brand of creativity.

"I figured out a way to film Cyclops

on budget by shooting long hours while using a new, fast film called Tri-X. This was back in the black-and-white days. I had experimented successfully with the new film and planned on shooting location scenes straight into the night. My cameraman, however, was one of those types in Hollywood who just aren't enthusiastic over new and innovative processes. He refused to shoot after the sun went down because he insisted there wasn't enough light. We had a confrontation and I wound up shooting everything *myself*. The next day we had a new cameraman on the set."

Gordon's reputation as being a quick thinker spread. Republic Pictures offered him a chance to shoot the ultimate monster-on-the-loose film, *The Beginning Of The End:* a tale of radioactive nuttiness wherein an army of gigantic grasshoppers takes over Chicago. As bizarre as *that* plotline may sound, it turned out to be quite sedate when compared to the off-screen antics going on behind the scenes. "What a mess," Gordon groans.

"Just finding the right grasshoppers to take over Chicago was a challenge. I found the type I wanted through the U.S. Agricultural Department in Wash-



A gallery of grotesques from Bert I. Gordon. Clockwise from top left: Preacher-turned-actor Marjoe finds that the power of prayer plus a well-aimed rifle works wonders in H.G. Well's Food Of The Gods; a titanic teenaged foot taps out terror in an earlier version of the same Wells story, The Village Of The Giants; next, Col. Glen Manning, The Amazing Colossal man, goes bird watching; a pair of star-crossed lovers become dinner for The Spider; Pamela Franklin prepares for a terminal bout of beauty sleep in Necromancy; The Spider takes a stroll much to the dismay of local residents and The Empire Of The Ants bugs Robert Lansing.

THE FANTASTIC FILMS OF BERT I. GORDON

King Dinosaur: Lippert Films, 1955
The Cyclops: Allied Artists, 1956
The Beginning Of The End: Republic,
1957

The Amazing Colossal Man: American International Pictures, 1957.

Attack Of The Puppet People: AIP, 1958
The War Of The Colossal Beast: AIP,

The Spider: AIP, 1958

The Boy And The Pirates: United Artists, 1960

Tormented: Allied Artists, 1960
The Magic Sword: United Artists, 1962
Village Of The Giants: Embassy, 1965
Picture Mommy Dead: Embassy 1966
Necromancy: Cinerama, 1972
The Mad Bomber: Cinemation, 1973
The Food Of The Gods: AIP, 1976

The Empire Of The Ants: AIP, 1977

Devil Fish: in production

ington. The only grasshopper that had all the qualities I was looking for existed in Waco, Texas. I made arrangements with someone in Waco to gather a few hundred of them together. Then I contacted the Agricultural Dept. in Washington and also in Sacramento (since I was filming in Los Angeles). I asked them for permission to bring the grasshoppers into the state. I got a definite 'NO.' California said it didn't really need a new species of grasshopper in the state.

"I was stymied. I had a film going and no stars. Finally, they agreed to permit the grasshoppers to come into California if I only used male insects in the film. They couldn't reproduce. OK. I had to get an expert on the sex lives of grasshoppers to go through all the insects gathered in Waco and pull out only the male ones. He put them into these specially designed crates and sent them under bond to me in L.A. But, before I could get to them, I had to al-

low state agricultural experts and heaven knows what other kind of experts to examine the grasshoppers and make sure they were all males. Finally, they were turned over to me. Then, every day on the set, a young man from the state Agricultural Dept. would show up and hold a head count. He counted each insect, making sure none of them had escaped during the night.

"The only problem was that, with all the males being scrunched together, the insects turned out to be cannibalistic. They ate each other in-between shots. We'd come in every morning and there'd be bodies lying all over the place. By the time I had to invade Chicago, I only had about twelve grass-hoppers left!"

Despite the extraordinary "hardships" involved, The Beginning Of The End was completed, released and proved a huge success with teens, leading Gordon to sign a four picture deal with AIP. The resulting films were some of his most famous: The Amazing Colossal Man, War Of The Colossal Beast, Attack Of The Puppet People and The Spider. The latter is considered by many to be the ultimate teen SF-monster flick, with a giant spider chasing hot-rodders for over an hour. "Fortunately," Gordon states, "no one stepped on the star of the film during production."

With the dawn of the sixties, budgets had grown and color had come into its own. Although still saddled with less than 2001-sized budgets, the creative Gordon managed to dish up two of his finest fantasy outings within a period of twenty-four months: The Boy And The Pirates and The Magic Sword. Brimming with genies, dragons, vampires, towering ogres, swashbuckling pirates and witches, the films proved to be highpoints of Gordon's career.

"They were fun to do," he recounts.
"I had real fun with the dragon in *The Magic Sword*. It was the biggest miniature I had ever worked with, nine feet tall. I built it that large so the flames wouldn't seem phony on the screen. In the finished film, the two-headed

GLASSER ON GORDON

productions was the appropriately horrific music conjured up by composer extraordinaire Albert Glasser. Recently, the composer of The Amazing Colossal Man, War Of The Colossal Beast, The Boy And The Pirates, The Beginning of The End, Attack Of The Puppet People and The Spider scores reminisced about his introduction to Gordon's monstrous world of SF filmdom. "Bert Gordon's a remarkable man," stressed Glasser. "He has a beautiful brain. He's a mathematician and a science-fiction lover from way back. He came to me when he was looking for a composer. I had just finished scoring Huk, He was working in a film lab two doors down from mine and heard the music over the movieola. He walked into my room and asked: 'Did you write all that stuff?'

- " 'Naturally, who else?"
- "Well, I'm doing this movie called *The Cyclops* and I need someone just like you."
- " 'Thank you.'
- " 'But we don't have too much money . . .
- " 'How much?' He mentioned a figure and I gulped.
- "Well, maybe we could raise the price a little," he said. We bargained for a few minutes and agreed on a price. I finished the score for him and he had fourteen heart attacks when he heard it, he loved it so much. We became very fast friends and worked on a lot of films together. It was a very enjoyable experience."



King Dinosaur (left)
was Bert Gordon's
first professional
effort. Today, he
describes the film
as "prehistoric,"
but it established
him as an efficient,
economical filmmaker. The plot
concerned a quartet of astronauts
marooned on a lizardladen planet.



War Of The Colossal Beast (above) was the successful sequel to the Amazing Colossal Man-the story of the ever-growing exploits of a nuclear blast victim. The Beginning Of The End (right) pitted an army of giant grasshoppers against Chicago.



The Magic Sword was one of Gordon's most ambitious projects.
Tracing the exploits of the legendary St.
George (Gary Lockwood), it featured a dragon, a magic horse, an undying army of knights and a gaggle of freaks.

dragon looks a hundred and twenty-five feet tall. My hero George rides up to it and, after a battle, slays it. Meanwhile, during the filming, I had two men working inside it, controlling both the heads and the fire and a third man standing outside, feeding the flames."

After two more genre films, Village Of The Giants (a teen version of Wells' Food Of The Gods) and Picture Mommy Dead (a psycho-thriller), Gordon suddenly found that the market for imaginative cinema had dwindled, all but disappearing. "I turned to other types of movies," he admits.

Producing one non-fantasy film in six years, the feisty film-maker made a hesitant return to the realm of makebelieve in 1972 with Necromancy (witches and Orson Welles) and in '73 with The Mad Bomber (a nut-on-the-loose tale). Once convinced that the public was again ready for his brand of fantasy, Gordon unleashed a long-time pet project, H.G. Wells' Food Of The Gods, in 1976.

A film wherein ordinary animals attain gigantic size via "boom food," Food was sheer Gordon. Rats and chickens towered over actors via a series of travelling matte shots. The producer-director was once again in his element. True to form, however, he once again encountered quite a few . . . er . . . difficulties. "We had to raise over 400 rats for the film," he chuckles. "We worked closely with psychologists from UCLA who were experimenting with rats and their social units. Using students from the college, we trained them all. Brilliant animals. They climbed and ran back and forth on cue. The only thing they couldn't do was remember their commands for long periods of time. Unlike dogs, rats just can't retain a lot of knowledge. They had to be reinforced every day before shooting."

If absent-minded rats weren't enough to keep Gordon on his toes ("Everyone got nipped at least once."), mother nature certainly was. "We were hit by two snow storms in a row. We had filmed half of the movie on this little island off the coast of Vancouver. The place was totally isolated, which is why I chose it. The only way to get on or off the island was by ferry. The snow hit us and we were marooned. The ferry boats stopped running. The electricity went off. We had ten-foot snow drifts around the equipment. It was real disaster-time. I had to bring in flame throwers to get the snow out of the way. We cleared an area and finished the film."

With Food Of The Gods a success, Gordon chose another Wells offering as a follow-up, Empire Of The Ants. On this production, the film-maker encountered opposite climactic extremes. "We went to the jungles of Panama

because they had the exact ants I needed. They were deadly to humans, though. They had a sting that could paralyze the respiratory system of a grown man. But I needed that type of husky ant. An inch-and-a-half long. Very nasty insects. We were very careful."

Despite tales of cannibalistic insects, blizzards and long hours, Gordon still relishes his role as consummate cinemaniac. "Problems just don't bother me," he smiles. "You expect a certain amount of difficulties when you're making a film. It comes with the territory. I don't mind."

Indeed, Gordon seems to take everything in stride. For his next mindboggler, Devil Fish (a '79 release), the master of versatility journeyed to four different oceans to get the right sea footage he needed, often going under water with his camera crews for difficult shots. "I had to learn to scuba dive," laughs the veteran producer. "But it was worth it. It's beautiful down there. We're filming right at the bottom, too. No phoney shots. And the fish are real fish. Using the methods I developed to create illusions on the screen, I'll have fifty-foot sharks and thirty-foot devil fish swimming around. They won't be mechanical models like the ones they used in Jaws." Asked to describe the upcoming film, Gordon shrugs and says. "Imagine Jaws on an

epic, James Bond scale."

After twenty-five years in the film business, it is clear that Bert Gordon has no regrets. As a child, he longed to make movies. As an adult, he has produced some of the most popular teenoriented items in the fantasy genre. His only annoyance these days arises from hindsight-laden film critics who, comfortable with the big-budgeted spectacles of the last ten years, turn their backs on the so-called "B" moviemakers of the fifties. What some fantasy film fans forget is: without the "B" movies of that decade there would virtually have been no SF-fantasy on the screen.

Gordon isn't bitter over the classification, although he admits it irks him on occasion. "Sometimes I mind being called a "B" movie director. I guess it would bother anyone not to be considered part of the top class. But the most detrimental effect of that classification is that it forces some directors to go after big money and make big money films. Sometimes they ignore a lot of smaller projects as a result. A lot of movies wind up not being made.

Too often, films are rated and classed by the amount of money in their budget. That shouldn't really enter into it. Some films don't call for a lot of money. If the film is planned as a 'little' film, if it has a good idea that's a 'little' idea, that doesn't mean it

shouldn't be made. Too many people won't even look at a movie today unless it's a ten- or twelve-million-dollar production. That's silly. Everyone loses that way."

Indeed, the presently ignored 'little' movies of the fifties served as inspiration to many of today's more popular SF and fantasy boosters, including Steven Spielberg, George Lucas and Brian De Palma. Why the occasional critical backlash against the vintage "B's?" Bert Gordon doesn't really know or particularly care. "The socalled experts are self-appointed experts," he says evenly. "They have never really attempted anything like movie-making themselves. Many are would-be filmmakers. People who would like to be doing what I do but are afraid or unable to accomplish it themselves."

Gordon abruptly cuts off his gentle tirade and returns to the subject he likes best: movies. Devil Fish will mark the fifteenth time he has unleashed one of his creepy creatures on an unsuspecting world. This time, however, he hopes his monsters bring him the ultimate prize. And what is it this mad movie-maker desires? An Oscar? Domination of the globe? Control of Earth's fishing rod concerns? "Nope," Gordon confides. "I'd like to pick up a copy of Variety and read the headlines: 'Devil Fish Outgrosses Star Wars!'" *



The Making of Fantastic Voyage

TURNING IN ON YOURSELF

Two years before 2001: A Space Odyssey and Planet Of The Apes appeared, Saul David produced the most expensive and audacious science-fiction film ever made.

By AL TAYLOR and RICHARD MEYERS

ou are floating in a soft maze of ethereal light. All around, bulbous creatues of red and white float in huge schools, their appearance constantly changing as if buffeted by unseen obstacles. The walls that partition your environment seem filmy, and beyond them can be seen more walls and more rushing balloons of many colors. As you drift on, your surroundings shift size, color and speed. The bubbles turn blue and green, sometimes sparkling intermittently purple. Intense blackness appears amidst other milky white balls until the darkness takes on a color all its own. Even the shadows have colors in this new world.

Suddenly the idyllic surroundings turn ominous. The speed at which you course along has become too rapid. The opaque circles that surround you have started to show signs of life—and it is not friendly. They have gathered in large groups and begin to close in on you. In your desperate move towards escape, you accidentally push through one thin wall, ripping a gaping hole in the weak red curtain. Quickly, clear worm-like coils join the undulating balls. Then they are upon you.

The coils slap across your body, tightly gripping your every limb with a life of their own. The white globes hold back until you are rendered helpless by the living rope, then they speed in for the kill. The last thing you see is a huge, thick balloon moving in on itself to make room for your body—which it will ingest, completely disintegrate, then continue as if you never existed.

In this case, the alien world described is not a neighbor of Tatooine, it can't be found in the Enterprise's log, and you can rest assured Roy Neary will never visit it with the Close Encounters mothership. This incredibly complex, unbelievably exact world is reality's greatest creation: the human body. To make an entertaining science-fiction film within this world took an audacious concept, years of planning and adaptation, months of arduous writing and rewriting, then more money than was ever lavished on a film of its type before. Saul David's Fantastic Voyage was made in 1966 at a cost of 6½ million dollars.

1966 was not a good year for cinematic science-fiction. It was the season of Cyborg 2087 and Frankenstein Meets The Space Monster, so when the 20th Century-Fox production showed up in the fall with its stark poster design and large publicity campaign, even people who had seen 66's more esoteric SF productions like Around The World Under The Sea and Night Of The Blood Beast, didn't know what to make of it. Here was a grand adventure of the imaginative, unseen since the "golden age" of the fifties, utilizing the biggest names in the business.

David was the producer, a regular independent fire-brand in the Hollywood world of flash-in-the-pans. He conceived of the movie's idea, using a story by Otto Klement and Jay Lewis Bixby to push it through the studio's Board of Directors, after successfully mounting Voy Ryan's Express and Our Man Flint in rapid succession. Richard

Fleischer was pegged as director, coming from a twenty-year career including The Vikings, Compulsion, and Twenty Thousand Leagues Under The Sea.

He, in turn, involved director of photography Ernest Laszlo, one of the great names in cinematography, whose credits include Two Years Before The Mast, Stalag 17, and Inherit The Wind. For the veteran professional, Fantastic Voyage would turn out as a 'final exam' for the knowledge he acquired during the past thirty years. Further trials awaited Fox's special effects team of L. B. Abbott, Art Cruickshank and Emil Kosa, Jr., whose task it was to realize art directors Jack Martin Smith and Dale Hennesy's gigantic stage designs.

After twenty-year veteran Harry Kleiner finished the screenplay and David Duncan further adapted it, the filmmakers began their own fantastic voyage.

The year is 1995. Although the world's science has developed, peace between nations has not. The hottest flare in the present cold war involves a Czech scientist named Dr. Benes, whose knowledge concerning miniaturization of living matter is a valuable weapon for both the East and West. His subsequent defection to America puts secret services and enemy assassins into an unprecedented mobilization. Just when it seems as if the doctor would make it safely to the underground headquarters of the Combined Miniature Deterrent Forces—a military/medical organization set up around Benes' discovery—a kamikaze

Three inner-body scenes which made Fantastic Voyage the entertainment extravaganza it was. Top: The crew of the Proteus prepare for their incredible journey. Left to right, Raquel Welch, Arthur Kennedy, William Redfield, Donald Pleasance, and Stephen Boyd. Middle and bottom: the bloodstream and lungs.

car barrels into the scientist's limousine.

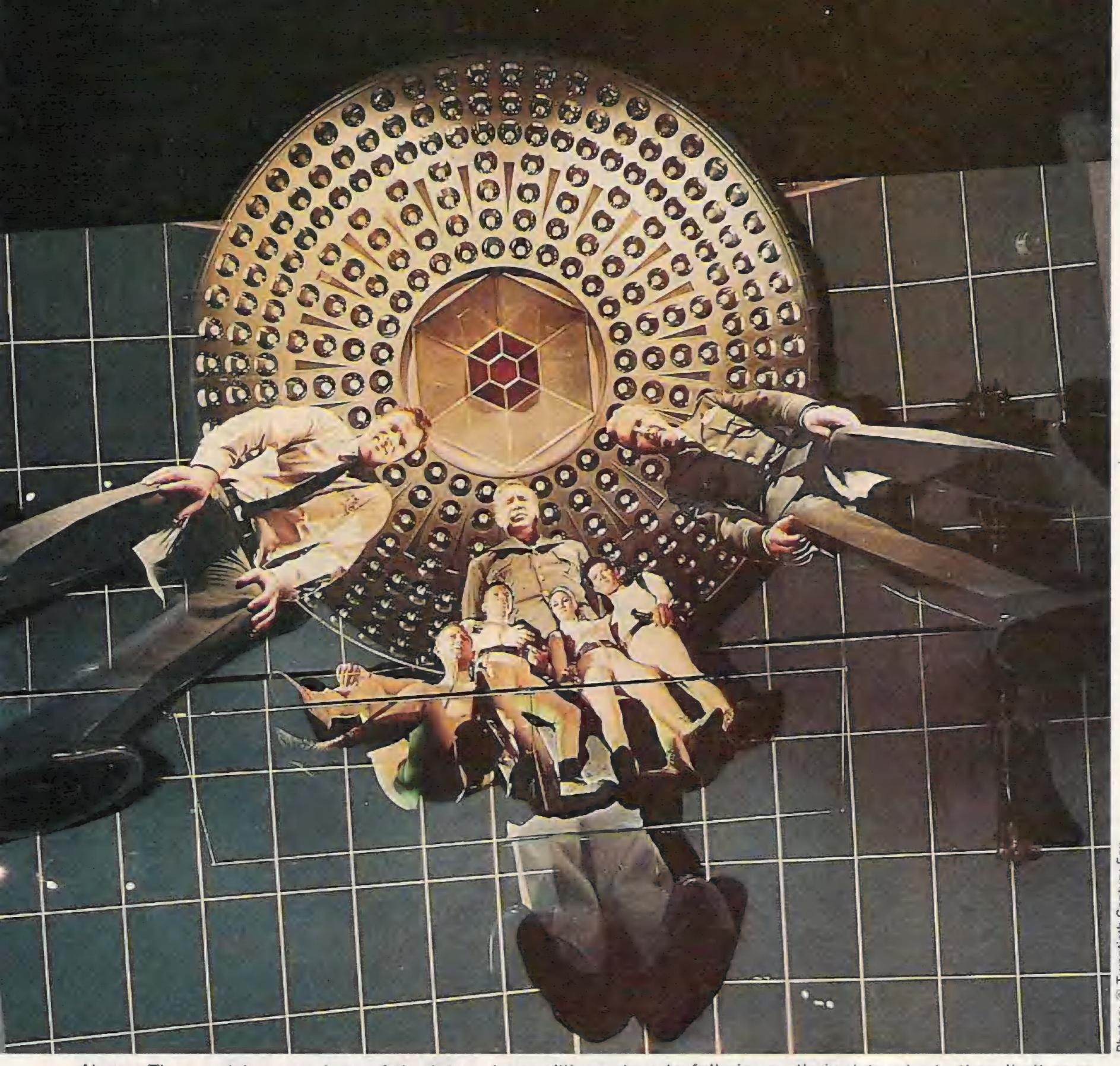
Benes' only wound is a small concussion (when his head hit the car door handle) but it is enough to cause a blood clot in the brain—one that is centrally located, right near the pituitary gland, and impossible to remove with normal surgery. But normal surgery is the last thing on the CMDF's collective mind. Charles Grant, an experienced government operative, is chosen to lead an incredible expedition through Benes' body to save the secrets of unlimited miniaturization.

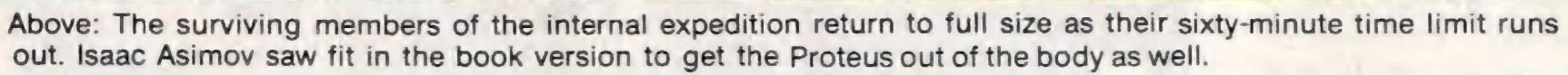
It seems as if Benes has let both sides know the initial techniques of his new science, the utilization of "hyperspace," but not the method to insure complete safety. The smaller a thing is made, the less time it will remain small. The way to beat this "uncertainty principle" is still locked in Benes' skull, and Benes' skull is being slowly choked to death by the blood clot.

The only man with the skill to operate is Dr. Peter Lawrence Duval, and the only assistant he will allow to help him is his long time protege Cora Peterson, a 25-year-old whose measurements rival her I. Q. The only man with the proper inner-body vehicle is Captain Williams Owens, the builder and pilot of the ship named *Proteus*. And the only man with enough knowledge of Benes' system to guide them is CMDF scientist Dr. Maxwell Michaels. This is the team chosen for the most astonishing operation ever conceived.

The initial plan is to have the six-







Right: Just one section of the operating room set, costing 20th Century-Fox more than a million dollars. Here, the presiding surgeon prepares to stop Benes' heart so the Proteus can travel through the life-giving organ in safety.

person crew reduced to microscopic size, injected into the neck's cartoid artery, reach the brain through connecting veins, wipe out the clot with a specially designed laser, then exit from the jugular vein, all within a sixty minute time limit. Not surprisingly, things do not go as planned. The unknowns and inconsistencies of miniaturization and the human body are large enough, but it is soon evident to Grant that someone aboard the Proteus is not just a scientist, but a saboteur as well!

The first disaster occurs almost immediately after their entry into Benes' body. A sudden and strong current grips the ship in an organic whirlpool of hemoglobin, pulling the group into an arterio-venous fistula; in layman's terms, this is an uncommon connection between an artery and a small vein, caused by a severe shock. Even though

the bridge is barely visual, to the reduced team it is a tortuous detour. But this is just the beginning of their problems

No sooner do they plot a new course than they discover the route takes them through the beating heart, a sheer suicidal move at their size. Thankfully the military brains prove equal to the threat. The supervising surgeons decide to stop Benes' heart by electric shock on the Proteus' approach, then start it upon their emergence.

In an instant, their race against time narrows down to sixty seconds. If the ship can't get through the heart in that amount of time, Benes will surely die, and if his life-giving organ starts too soon, they would surely be crushed. Astonishingly, the Proteus maneuvers through the right atrium, the semi-lunar valve, and out the ventricle with three seconds to spare.

That's when two acts of deliberate sabotage are discovered. First, half their air supply leaks out when a valve is shoved out of alignment, and even worse, the operating laser gun is purposely shaken loose of its protective mooring. As far as the crew is now concerned, if suffocation didn't get them, technical helplessness will.

But Grant doesn't give up that easily. He cannibalizes their radio equipment to repair the weapon and suggests that since they were in the lungs anyway, why not siphon a bit of Benes' air for their own use? Both ideas were inspired and workable, though the latter almost results in Grant's death when a third act of sabotage cuts his life-line and he's caught in the veritable hurricane of in-and-exhalation. The quick thinking of Dr. Duval saves his skin, but the dangers and delays are not over. After coursing through the

pleural lining—the double membrane surrounding the lungs—Grant decides to take a short-cut to the brain through the inner ear which could turn out to be a deadly time-saver. The least sound would set up a vibration that could easily rip the Proteus apart!

Cautiously the crew makes their move and just as it seems that the side trip is successful, a nurse in the operating room proper drops a scalpel. Immediately the tiny ship is buffeted in a world gone mad, streaking toward the hair cells. Grant, Cora, and Michaels, who had gone outside to rid the engines of clogging reticular fibers left over from the lungs, are almost immediately surrounded by antibodies answering their natural call to protect the body by destroying intruders. In the nightmare world, even a 25-year-old girl is a microscopic invader. The macho Grant manages to pull off a last minute rescue

before the ship arrives at their final destination—the brain.

Grant, Duval and Cora leave to destroy the clot, leaving Owens and Michaels in the ship with only minutes left before they return to normal size. Just as Duval successfully eradicates the medical danger, Michaels proves himself to be a double-agent and the greatest threat of all. He knocks Owens unconscious, trundles him into a swimsuit and out of the ship, then starts ramming the brain cells in an effort to kill off Benes once and for all.

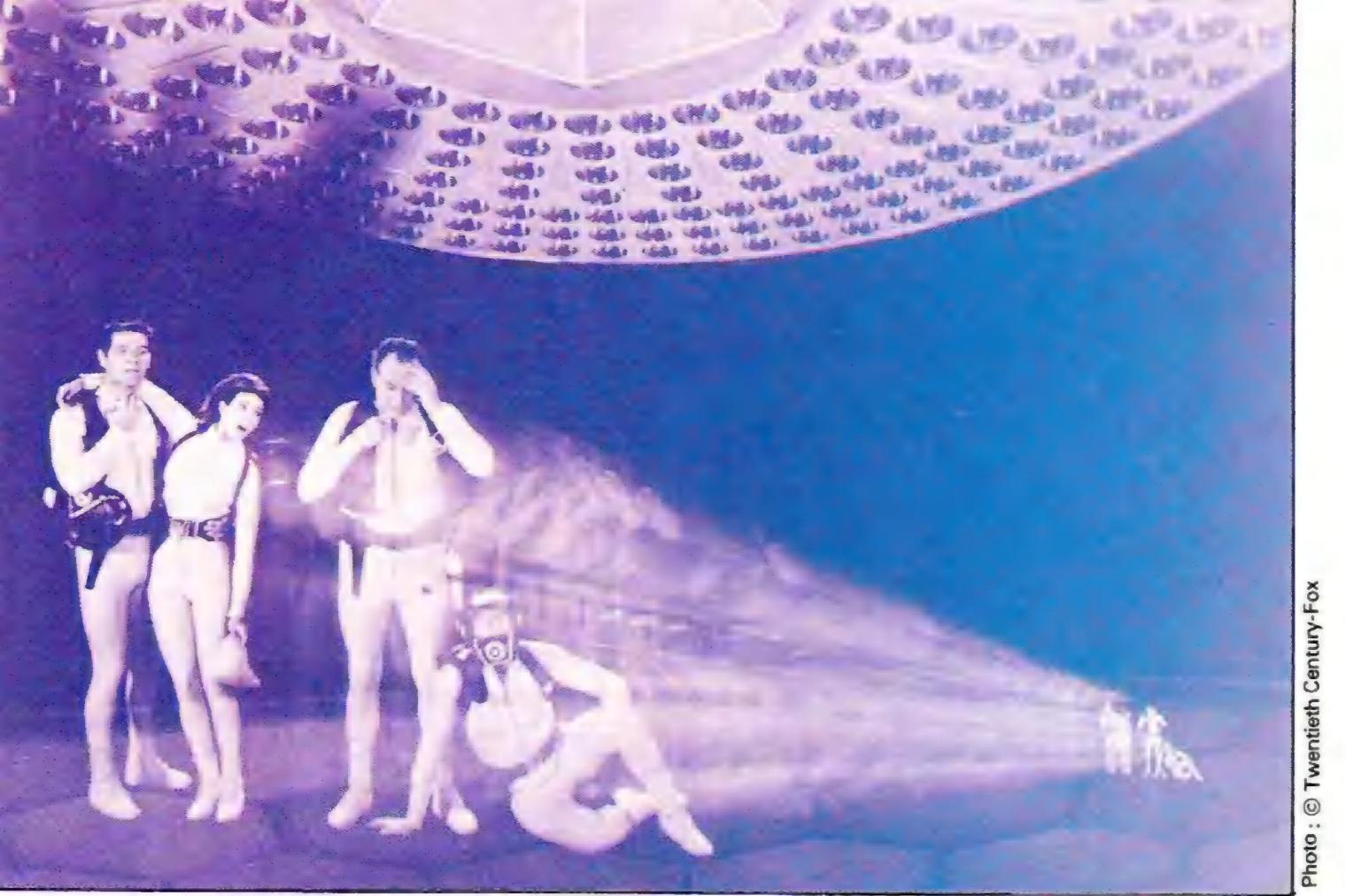
The villains of the piece thus far, the antiseptic white blood cells, that exist only to protect the body, now save the day by totally digesting the Proteus along with the hysterically screaming Michaels. Benes is saved, the spy is gone; all the remaining four have to do is get out of Benes' body in a minute flat. Their salvation comes in the form

of a single tear, a drop of water they ride to freedom around the eye. Democracy and the future of technology is saved.

It is hardly surprising in the light of this unique plotline that inventiveness was the key word on the set. Innovations had to be massive because the sets were gigantic. One of those most responsible for the film's success was Ernest Laszlo, and he set the tone of shooting exclusively for STARLOG.

"I was very anxious all the time to get on the set and work," he reported. "Because for a man with my background, this was a great challenge. I felt great because even with the large sets and the miniature work, all the variations could be controlled by the cinematographer and work quite well."

Laszlo had much to work with. The CMDF set alone was reportedly built at a cost of \$1,250,000 and measured a



One of the publicity shots shows the shrinking process.

FANTASTIC VOYAGE

Fantastic Voyage: A 20th Century Fox Release. 1966. Color. 100 Minutes. Produced by Saul David. Directed by Richard Fleischer. Screenplay by Harry Kleiner based on a story by Otto Klement and Jay Lewis Bixby as adapted by David Duncan. Cinematography by Ernest Laszlo. Art Direction by Jack Martin Smith and Dale Hennesy. Music by Leonard Rosenman. Special Effects by L.B. Abbott, Art Cruickshank, and Emil Kosa, Jr.

Charles Grant. Stephen Boyd
Cora Peterson Raquel Welch
General Carter Edmond O'Brien
Maxwell Michaels Donald Pleasance
Colonel Reid Arthur O'Connell
William Owens William Redfield
Peter Duval Arthur Kennedy
Jan Benes Jean Del Val

whopping 300 by 100 feet. "It was a basic set-up however," Laszlo continued. "There was more magic pulled off by the SFX people there than any great expertise in filming it." All the illusions of miniaturization were accomplished through traveling mattes—the subjects were photographed at varying distances and then a series of paintings were superimposed on the laboratory and operating room scenes.

The body, as it were, of the film was then concentrated on four main sets: the capillaries, the lung, the heart, and the brain. Both the capillaries and lung sac set were composed of specially invented and welded combinations of flexible resin and fibreglass. Added to that was Laszlo's lighting touch—he washed the set with amber light to suggest the presence of plasma, then placed color wheels outside to simulate cell movement.

"The illusions were fun to pull off," Laszlo remembered, "but I did have

some arguments about lighting and how the lighting should be done. But," he added with a twinkle in his eye, "I always won out in the end." And the film prospered by it. Laszlo correctly assumed that by reflecting colored lights through various translucent material instead of painting sets, a stronger and more abstract beauty could be achieved.

The heart set was actually 15 feet long, 5 feet high, and 7 feet wide, made of styrofoam and sculpted by artist Jim Casey. Then, based on a real human heart brought to the set by medical artist Frank Armitage, muscles and valves made of rubber were added, then the entire organ was coated with latex for realism's sake. The brain stage was 100 by 200 feet and filled with spun fibreglass, hand-sprayed from floor to ceiling in ways which conformed with anatomical drawings.

Even with all these grand designs, the centerpiece of the movie was the Proteus itself, a 42-foot long, 23-foot wide construction costing \$100,000 and weighing over 4 tons. Director Richard Fleischer brought in another old friend to handle the sub's designing chores, Harper Goff, who likewise did the honors on the Nautilus for the Disney-produced, Fleischer-directed Twenty Thousand Leagues Under The Sea. Goff had the new ship built in sections, so parts could be dismantled for easier filming inside.

It was just this sort of advance planning and detail that made Fantastic Voyage a veritable cinch to make. The only major stumbling block occurred at the very beginning of production. "In the preliminary tests," Laszlo related, "we had trouble pulling off the fluid-like motion of going through the circulatory system. We tried it initially in tanks of water but that was a disaster

for the people down under, and me trying to film. It looked like another Creature From The Black Lagoon. It looked like a water set. It didn't work.

"So I used one of the oldest tricks in the book. We filmed all the scenes 'dry.' That is, when the actors appear to be swimming, actually they're hanging from wires secured to overhead tracks, and I was filming at three times the normal speed. Using some diffusion and trick lighting, we made the magic work."

Audiences all over America were enchanted, not just with the plot and the sets and the special effects, but the performers as well. Saul David and Fleischer hired some of the better actors to flesh out their far-fetched fantasy, including Stephen Boyd, Donald Pleasance, Arthur O'Connell, William Redfield, James Brolin (in a minor role), and a young lady who was making a sensation all over the world.

"I met this attractive gal while working on the film," said Laszlo slyly. "Her name you'll be frankly familiar with, was Raquel Welch. I told her I heard all kinds of stories about her from the wardrobe and makeup departments, so she produced a picture of herself in a bikini for me. And I said, 'Raquel, that's the biggest navel I've ever seen!" And she said, 'Laszlo, you don't like me!' I made no comment, but we really got along quite well."

With all the movies' natural opulence and wonder, this logbook of a journey through a man's body is a perennial favorite with audiences and readers everywhere. The screenplay so impressed SF author Isaac Asimov that he deemed it his first and only work of film adaptation. Dr. Asimov's novel is presently in its 29th printing and still selling, even though he himself feels that miniaturization is physically impossible. The technical prowess used to bring the theoretical impossibilities to life so impressed the members of the Motion Picture Academy of Arts and Sciences that Fantastic Voyage was awarded the Oscar for Special Effects.

Ernest Laszlo, in the meantime, has gone on to the likes of Logan's Run and many other films, but he too has a special place in his memory for the futuristic travelogue. "There were no major difficulties doing the picture," he remembered. "Most of it we got on the first few takes. Basically it was a joy to work on. Recently someone asked me how it was different at the time of filming, more than ten years ago, and I said, 'Well, the greatest thing in your life is to glean the experience gathered throughout your career. Of all the films I've done, Funtustic Voyage gave me all the cinematographer's challenges in one picture. I used all my background material and made it work. We think it worked." *

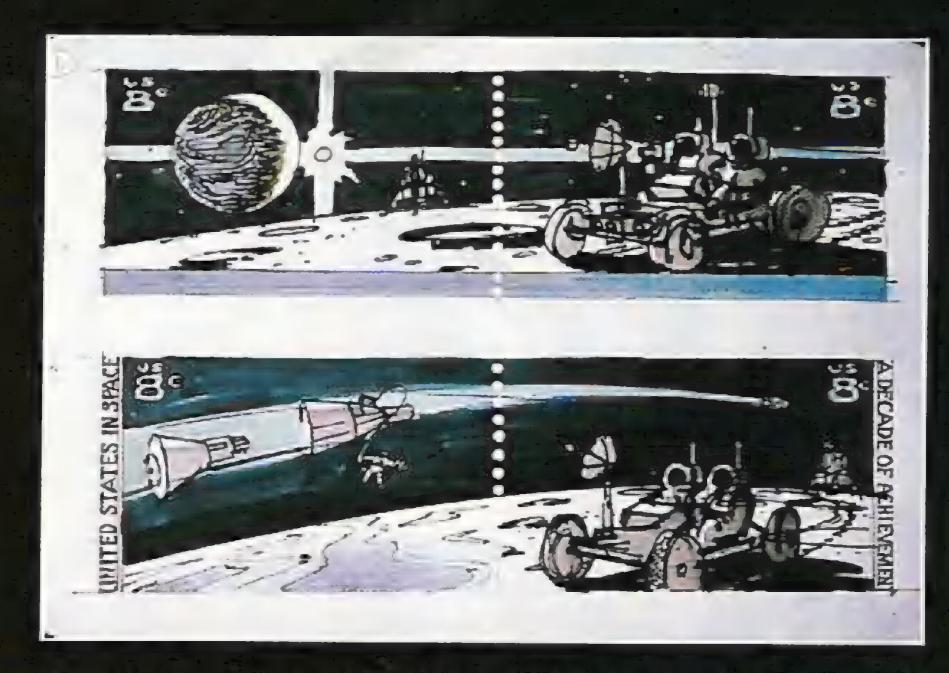


t is now more than two decades since the first artificial satellite was launched. On May 5, 1961, Alan Shepard took our first small step off-planet in a sub-orbital flight that lasted less than an hour, aboard a tiny metal shell called *Freedom 7*. The accomplishments of Project Mercury were celebrated in 1962 with the issuance of the 4¢, "U.S. Man In Space" commemorative stamp. The stamps on this page are all United States commemoratives. However, it has not just been the space powers who have celebrated humanity's slow-but-steady progress out of the Earth's 4,000 mile gravity well. On the spread immediately following are examples of some of the exquisitely rendered stamps from around the world—also commemorating those 'giant leaps for all mankind.' We think that you'll find them both aesthetically pleasing and informative.





Above: "Space Accomplishments" commemorative, issued 9/29/67.



Top of page: A rare "first day of issue commemorative. It includes an envelope with the soyuz-Apollo emblem, plus the two commemorative stamps and the signature of the artist, Robert McCall. Above: McCall's preliminary painting for the "Decade of Achievement" series—a set of five different stamps. Above the preliminary are two of the actual stamps. The series was first issues on August 2, 1971.



Above: "Project Mercury"— our first space stamp.



Above: "Skylab" commemorative, issued May 14, 1974.



Above & right: Two stamps commemorating the Apollo missions, issued in '69.

















Although they don't possess the technology or hardware to start their own space programs, many equatorial countries have a sophisticated awareness of some of the subtleties of space utilization—in particular, the fact that geosynchronous orbits (desirable for communications satellites) are most easily and economically achieved through equatorial launchings. Some of these countries have already let it be known that they have "launch sites" available—if the price is right.















CELEBRATING SPACE

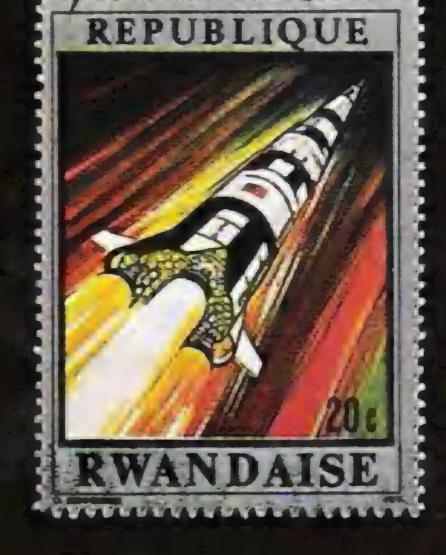






































Science fiction's favorite son is back, and NBC has him for a full mini-series. Starlog proudly presents an exclusive look at renowned space artist Bob McCall's original designs for the forthcoming show . . .

By LOUIS BROADHURST

n January 7, 1929 a science fiction legend was born. On that date, the first Buck Rogers comic strip made its appearance in a handful of American newspapers. Based on two pieces appearing in 1928 issues of Amazing Stories, Buck Rogers was the brainchild of writer Philip Nowlan, who went on to script the strip. Before long, Buck became a veritable American institution.

A former World War I fighter pilot who is trapped in a Pennsylvania mine cave-in and wakes up in the 25th Century, Buck, together with heroine Wilma Deering, top scientist Dr. Huer and villainous Killer Kane delighted SF audiences worldwide (via a movie serial, books and magazines) until 1967 when the comic strip was officially retired.

And now...Buck Rogers is back!! This fall, NBC-TV will televise three two-hour telefilm installments of the new adventures of Buck Rogers. And STARLOG proudly retraces the origins of this TV event, via the wondrous artwork of space artist Bob McCall, in the exclusive Buck Rogers panorama in these pages.

NBC, it seems, first envisioned the series last summer. "They gave me a call," Bob says, "and asked me to do some designs for the show. I tried to stick pretty much to the original Buck Rogers flavor. I finished the drawings in about two weeks and then sent them off. I didn't hear any word from the



Robert McCall envisioned three types of spaceships for the then embryonic *Buck Rogers* TV series: a mothership, a fleet of fighterships and (above) a series of space probes.

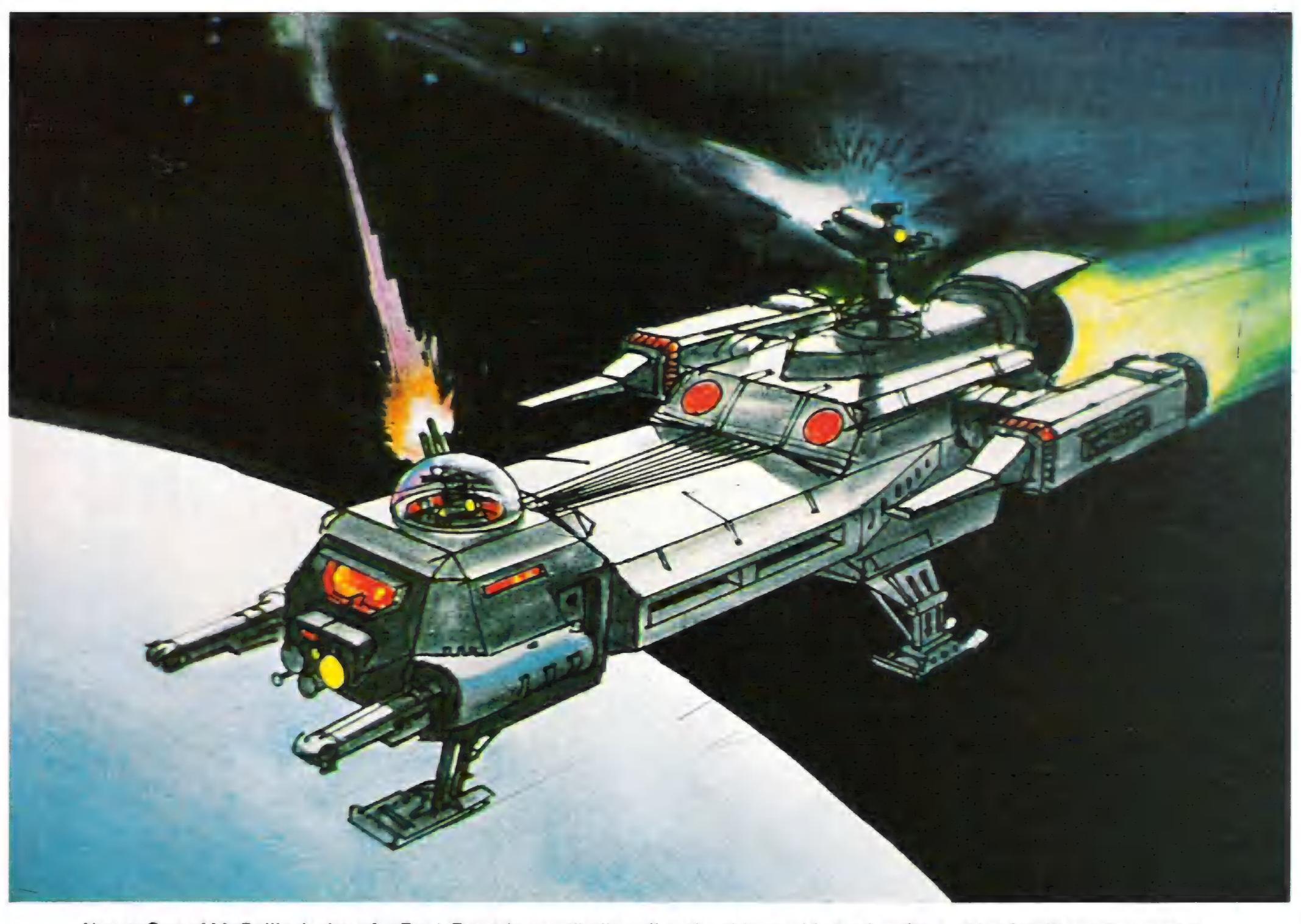
Coast for quite some time."

The reason that Bob, and most science-fiction fans were kept in the dark as to Buck's fate was that, for a time, there was no Buck Rogers TV show. As soon as it had started, the effort seemed to stop. Producers were changed. Key personnel were "let go." NBC declared a moratorium on the production.

But now, happily enough, work on the show is going full steam ahead, although one NBC executive states "This second attempt is like a whole new show. It's not at all like what was planned last fall. The first *Buck Rogers* was going to be very science fictionish. The new one will be more fantasy oriented, more *Star Wars* inspired."

And what about McCall's designs? Says Wayne Smith, of Doug Trumbull's Future General (Buck's special effects headquarters), "We've been working on the special effects for the first show since February. So far, none of Bob's designs have been used. They might be for the second and third installments. Things are a little crazy here at the moment. We're all really pleased with how fast things are coming together, but it's really busy."

Helming the *Buck* busywork this time around is executive producer Glen A. Larson. Glen, together with supervising producer Leslie (*Outer Limits*) Stevens, wrote the premier episode: "Buck Rogers In The 25th Century." It should be noted that Larson is the guid-



Above: One of McCall's designs for Buck Roger's own "believer" probe ship, a mid-sized craft capable of visiting other worlds.

The 25th Century Premieres This Fall, as . . .

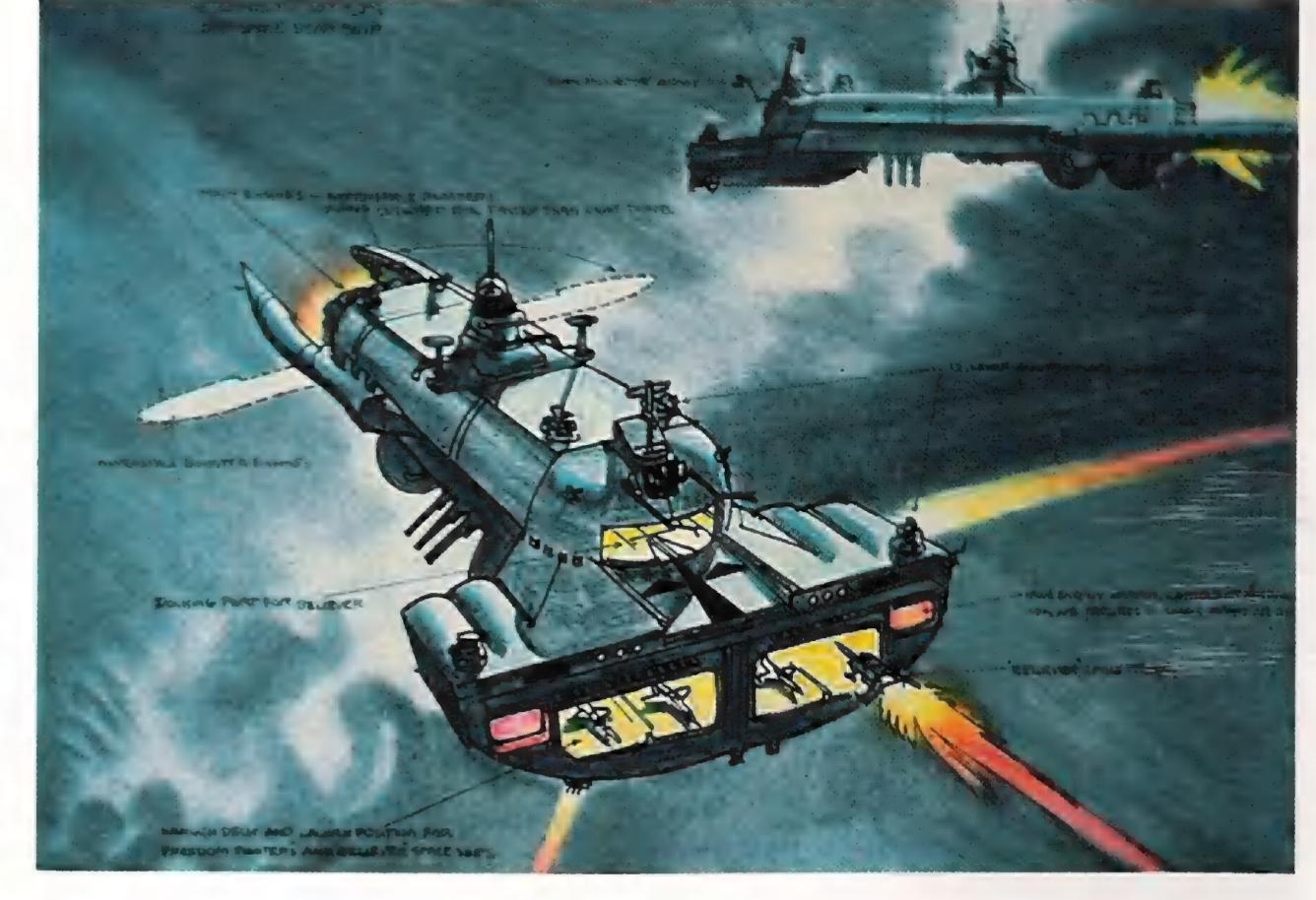
ing light behind ABC-TV's upcoming Battle Star"Galactica" effort as well. Riding shotgun on the current crop of Rogers madness is the show's producer Dick Caffey, who promises a top notch science-fiction swashbuckler for the approaching season.

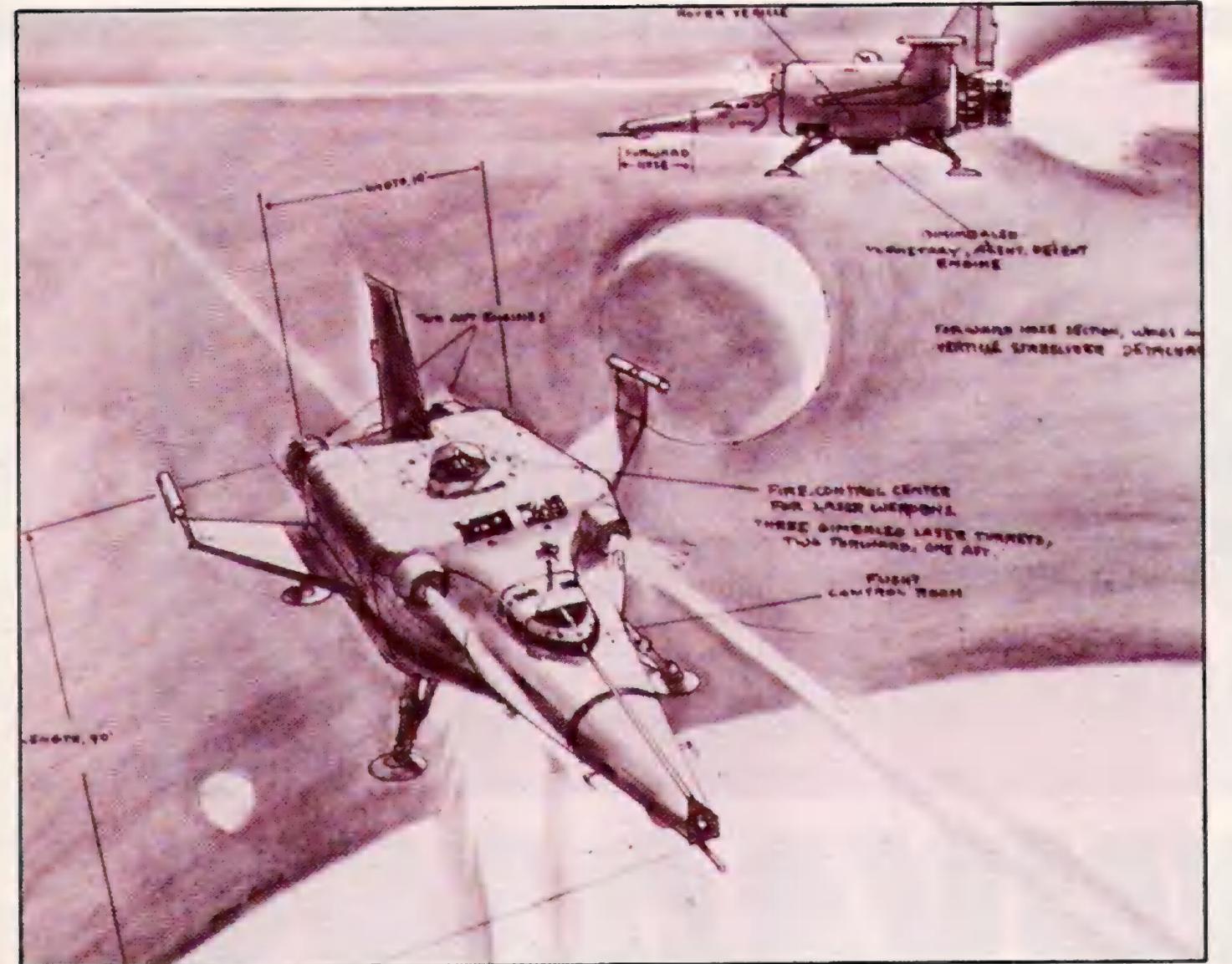
Filming has already begun on the SFextravaganza and the first episode is thus far slated for September. As more and more pieces of information leak out about the long-awaited production, it becomes evident that the new Buck Rogers should live up to a lot of curious Rogers devotee's expectations. And one of the most curious is artist McCall. "I'd really like to see what they do with it," he says. "I wonder if they'll use my designs."



Buck Rogers Spacecraft Designs by Bob McCall

One of McCall's depictions of the titanic Constitution, a deep space starship. In the front of the craft is the main engine area which includes a hyperspace booster: an attachment which swings outward for faster than light travel. In the rear is a hangar deck and launching platform designed for both tiny "freedom fighters" and mid-sized "believer ships." The rear of the craft also contains a high energy weapon capable of neutralizing massive targets such as enemy ships, asteroids and small moons.

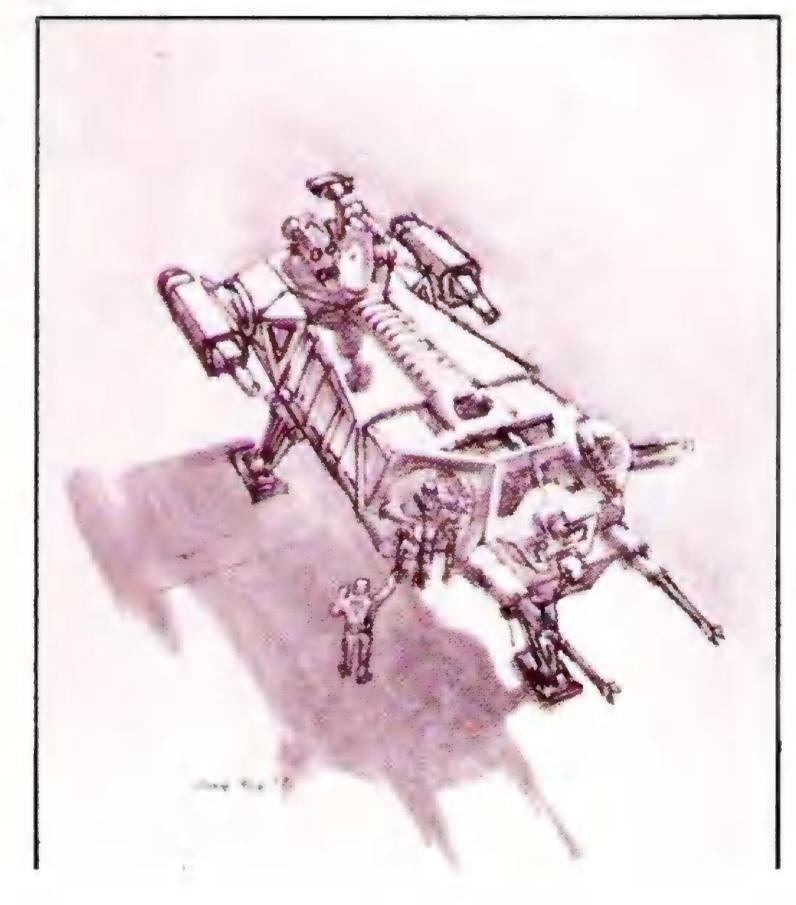


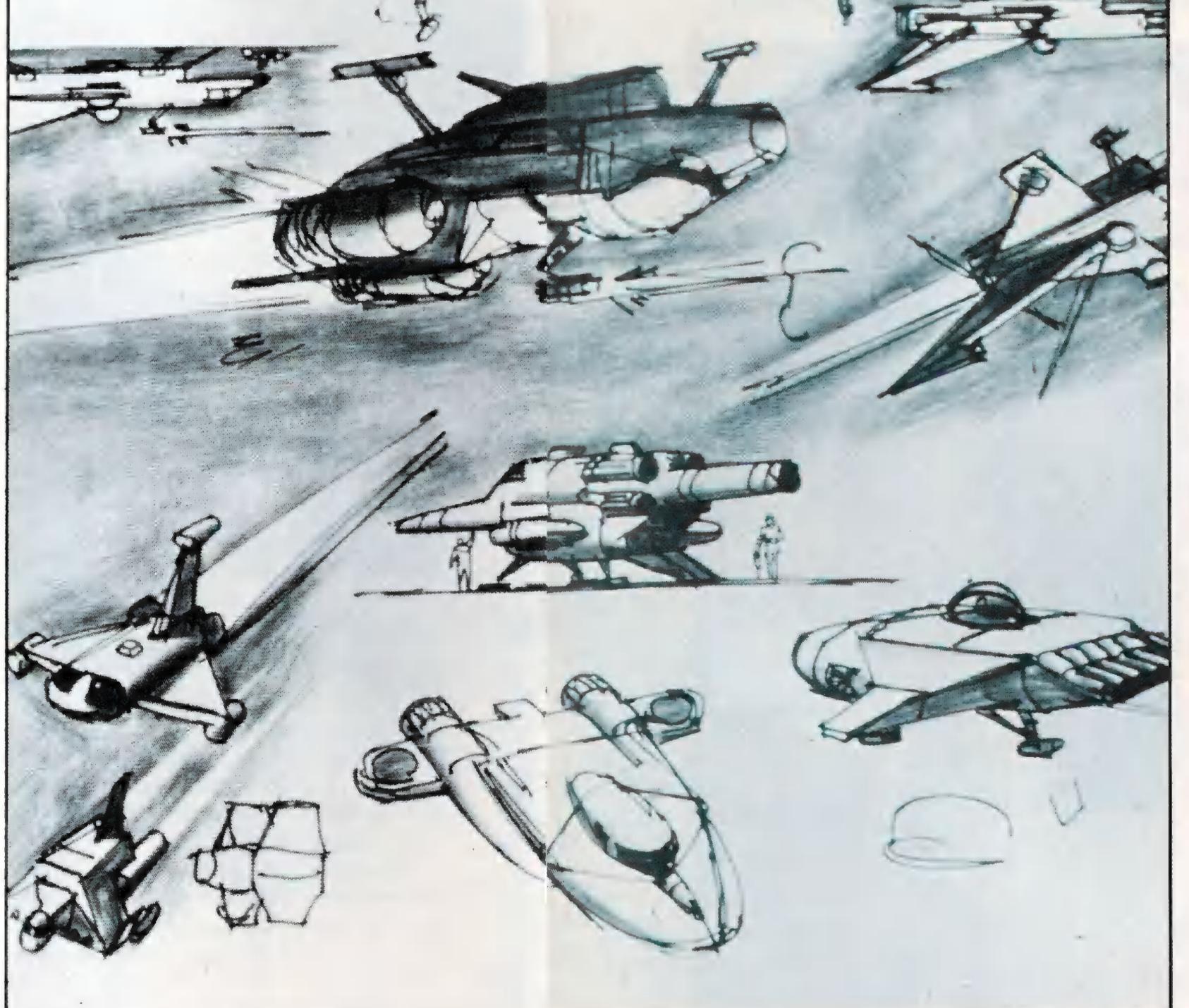


Two different views of McCall's proposed "believer" space probe craft. The spaceships were envisioned as being able to leave the mothership and journey to alien planets. On the top of each ship is a turret very much like the ones found on standard WW II fighter planes. In this case, the "bubble" contains a fire control center for laser weaponry. Although designed mainly for interplanetary excursions, the ships have a goodly amount of defensive weaponry including laser weapons on each side of the ship's forward nose section. On the belly of the craft is an ascent/descent engine used for landing and taking off from alien terrain.



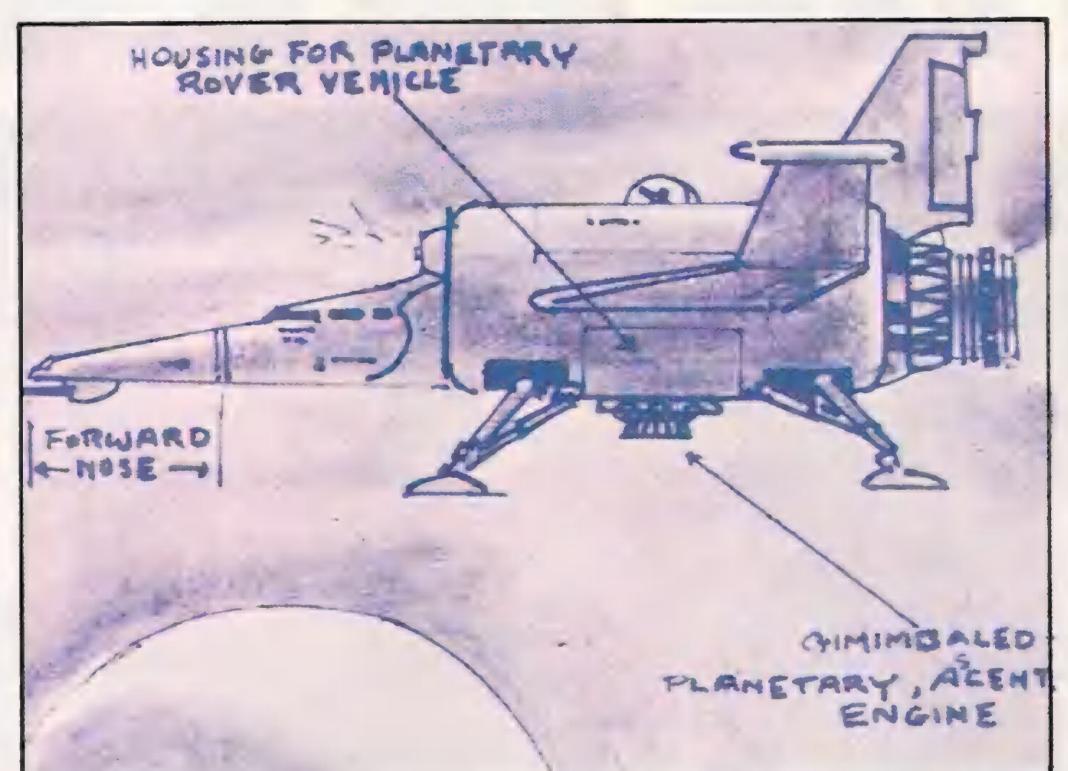
Above: The tiny ships darting by the mothership are fighter craft: short-range spaceships designed to protect the Constitution from hostile forces. Right: one of Bob McCall's abandoned designs for a medium-sized space probe vehicle. This version boasts laser cannon.



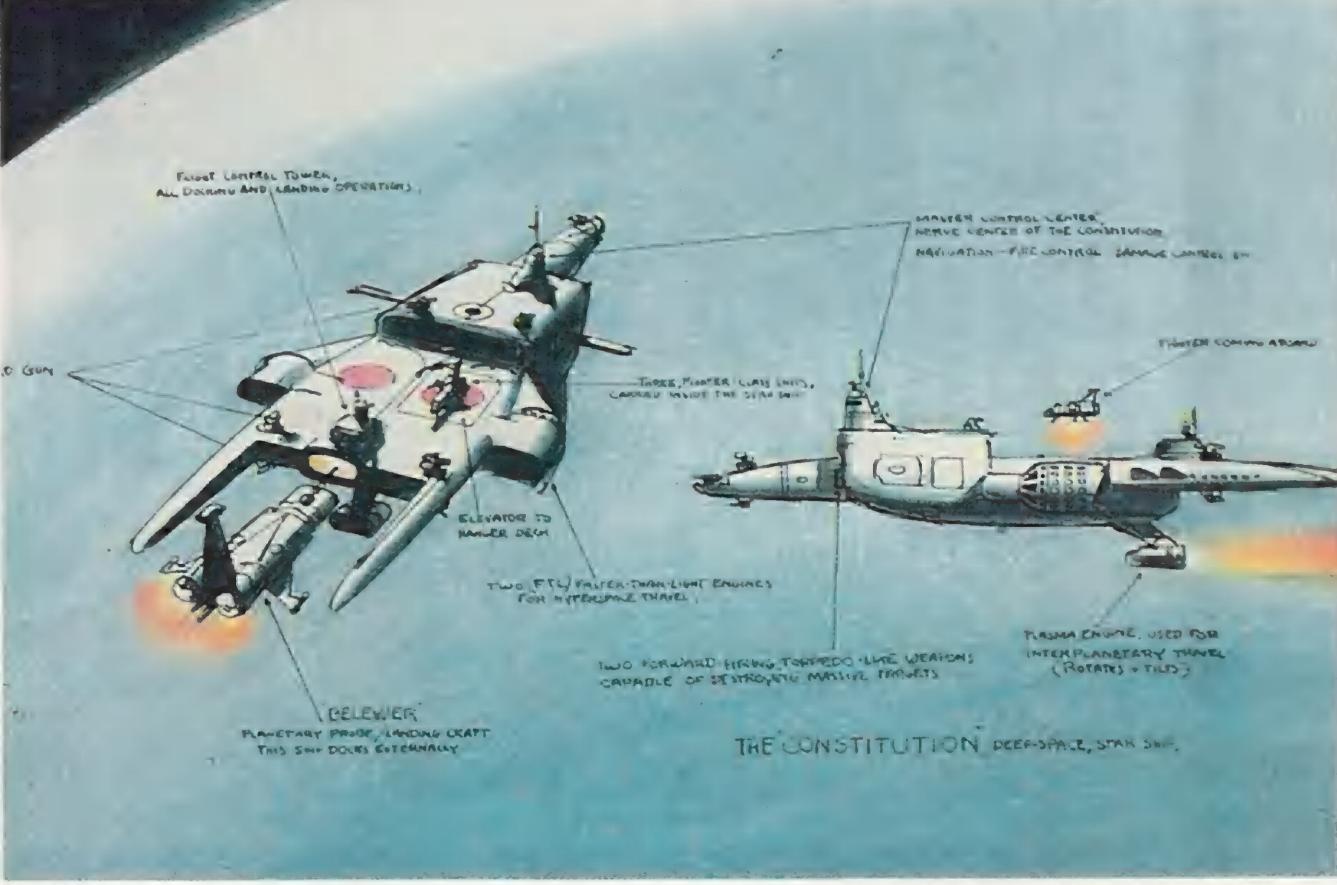


Above: Various designs for spaceships originally conceived for *Rogers*. On the bottom half of the sketch are some unused fighter plans. Above those are several "believer" space probe craft.

Right: Another version of McCall's powerful mothership, the Constitution. In this design, the rear of the craft is a docking area for the "believer" space probes only. The fighter planes land and take-off from a runway on top.



All art: Courtesy Bob McCall







Top: David Vincent (Roy Thinnes) sees alien saucer land. Above: Vincent gets to explore the invaders' craft.

"They're here among us now... in your city... maybe on your block. They're invaders... alien beings from another planet... but they look just like us! Take a look around. Casually. No sense letting them know you're suspicious. The new neighbors across the street. The substitute teacher. That too-pretty secretary in your husband's office. Any one of them might be an invader from outer space."

By GARY GERANI

his is how producer Alan Armer described the premise of his newest TV show, The Invaders, prior to its debut in the fall of 1967. Executive producer Quinn Martin (creator of Cannon, The FBI, Barnaby Jones, et al) had the highest hopes for this series, since it combined the fanciful element of science fiction with the 'running man' suspense formula used so successfully in Martin's own The Fugitive.

The opening episode introduces us to the show's hero, a no-nonsense gent named David Vincent (Roy Thinnes) who stops at a deserted diner late one evening and witnesses the landing of a spaceship. Aliens from a dying world, he later discovers, plan to use their ability to assume human form to infiltrate all institutions of human society: the government, the police force, the news media, etc.—until they control our planet. Although the authorities and many of his friends consider him a crackpot, David resolves to combat these aliens and save a disbelieving world from their sneak invasion.

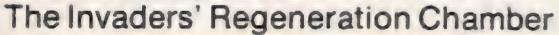
During the show's first season some excellent programs were produced (one critically acclaimed episode was "The Mutation," featuring Suzanne Pleshette as an alien woman with human emotions), but later episodes were increasingly dull and reminiscent of standard spy melodramas. In contrast to this was the remarkably high level of special effects. Although the much-publicized

flying saucer did little more than land and take off, artists from the Howard Anderson company drenched these shots in colored light and wowed viewers with truly breathtaking compositions. Another impressive bit of parlor magic was the "incineration" death of the aliens, who go up in a cloud of optical smoke whenever they are killed on our planet.

The music used for Invaders is noteworthy and has a rather curious history. Composer Dominic Frontiere, famed for his Outer Limits work, parlayed the entire score from "The Forms of Things Unknown" (the last Limits episode produced under Joseph Stefano's reign) into theme and background music for The Invaders. To this he added a special, two-note piece that epitomized the dread that one associates with outer space invasions. TV fans may recognize some of Frontiere's stirring compositions in other television programs (usually those produced by Quinn Martin) and several made-for-TV movies.

In a last ditch attempt to salvage the show during its second and weakest season, Alan Armer changed the premise slightly with an episode called "The Believers." From this point on, David was no longer alone in his battle against alien aggression: a group of dedicated men and women offered him money, assistance and business/political connections. What they didn't provide, however, were passable ratings, and the series was cancelled in 1968 after 43 episodes.







A rare shot of the aliens' raygun





FIRST SEASON: 1967

BEACHHEAD

Writer: Anthony Wilson. Director: Joseph Sargent Guest cast: Diane Baker (Kathy Adams), J.D. Gannon (Ben Holman), James Daly (Alan Landers) John Milford (Carver), Ellen Corby (Old lady) Vaughn Taylor (Mr. Kemper).

At a deserted diner in the dead of night, architect David Vincent witnesses the arrival of a spaceship. Reporting it, he is considered a crackpot after he returns to the landing site with police and his business partner, Alan Landers, and finds the craft gone. Vincent eventually learns that the aliens from a distant galaxy are invading the Earth. After Landers is ruthlessly killed by the Invaders, Vincent decides to dedicate his life to stopping this unearthly threat.

This pilot film originally ran 90 minutes, and the complete version was screened during the Museum of Modern Art's Science Fiction Retrospective in 1969. (As far as anyone knows, this was the only time the unedited print was publicly screened.) "Beachhead" was also remade in 1977 as "The Nomads," an episode of Quinn Martin's Tales Of The Unexpected on NBC-TV.

THE EXPERIMENT

Writer: Anthony Spinner. Director: Joseph

Guest cast: Roddy McDowall (Lloyd Lindstrom) Laurence Naismith (Dr. Curtis Lindstrom), Harold Gould (Dr. Paul Mueller). Dabbs Greer (the minister), Willard Sage (Lt. James).

David Vincent forestalls an attempt on the life of famed astrophysicist Dr. Curtis Lindstrom, who is prepared to expose the Invaders at an international conference of scientists.

THE MUTATION

Writer: David Chandler, George Eckstein. Director: Paul Wendkos.

Guest cast: Suzanne Pleshette (Vikki), Edward Andrews (Mark Evans), Lin McCarthy (Fellows), Roy Jenson (Alien), Rudolfo Hoyos (Miguel).

The Invaders are waiting for David Vincent when he searches the Mexican desert for a saucer site with nightclub stripper Vikki as his guide. Vikki, in truth, is an alien woman with human emotions, and she sacrifices her life to save David's in the dramatic climax.

THE LEECHES

Writer: Dan Ullman. Director: Paul Wendkos. Guest cast: Arthur Hill (Warren Doneghan), Mark Richman (Tom Wiley), Diana van der Vlis (Eve Doneghan), Robert H. Harris (Hastings).

Six scientists, each a specialist in his field, have disappeared and David Vincent is summoned by the seventh, electronics expert Warren Doneghan, who thinks he will be

GENESIS

Writer: John W. Bloch. Director: Paul Wendkos. Guest cast: Carol Rossen (Selene Lowell), Louise Latham (Joan Corman), Tim McIntire (Steve Gibbs), Phillip Pine (Hal Corman), William Sargent (Dr. Ken Harrisom), John Larch (Gret Lucather).

Motorcycle cop Hal Corman is driven mad by what he sees in an old station wagon he stops on a beach road for a traffic violation This event leads David Vincent to a sea lab where alien life is being created.

Writer: Don Brinkley. Director: Paul Wendkos. Guest cast: Jack Lord (George Vikor), Alfred Ryder (Nexus), Diana Hyland (Sherri Vikor), Richard O'Brien (Police sargeant).

A dying telephone lineman's fantastic story leads David Vincent to investigate war hero George Vikor's vast manufacturing complex. He finds the owner under the strange domination of a "Mrs. Nexus."

NIGHTMARE

Writer: John Kneubuhl. Director: Paul Wendkos. Guest cast: Kathleen Widdoes (Ellen Woods), Robert Emhardt (Mr. Ames), Jeanette Nolan (Miss Havergill), James Callahan (Ed Gidney), Nellie Burt (Lena Lapham).

Vincent arrives at the small farming community of Grady to interview teacher Ellen Woods, who reportedly witnessed a locust attack. Before long Vincent discovers terrifying evidence that leads him to suspect the Invaders of turning insects into deadly car-

DOOMSDAY MINUS ONE

Writer: Louis Vites. Director: Paul Wendkos. Guest cast: William Windom (Maj. Rick Graves), Andrew Duggan (Gen. Beaumont), Wesley Addy (Tomkins), Robert Osterloh (Carl Wyeth).

A flying saucer is seen landing at an installation where the largest underground nuclear test in history is to occur. Major Rick Graves. chief of security, fears alien infiltration and calls on David Vincent for help.

QUANTITY: UNKNOWN

Writer: Don Brinkley. Director: Sutton Roley Guest cast: James Whitmore (Harry Swain), Milton Selzer (A. J. Richards), William Talman (Col. Griffith), Susan Strasberg (Diane Oberly).

Investigating a mysterious cylinder found in the wreckage of a plane, David Vincent is taken by gunpoint and accused of being an alien from outer space.

THE INNOCENT

Writer: John W. Bloch. Director: Sutton Roley Guest cast: William Smithers (Nat Greely), Michael Rennie (Magnus), Robert Doyle (Sgt. Ruddel), Patricia Smith (Edna Greely), Paul Carr (Billy

David Vincent is abducted and taken aboard a flying saucer by Magnus, the aliens' spokesman. He is then told he will be transported to a Utopia to see for himself that the aliens are on Earth to help mankind.

THE IVY CURTAIN

Writer: Don Brinkley. Director: Joe Sargent. Guest cast: Jack Warden (Cahill), Susan Oliver

(Stacy), David Sheiner (Mr. Burns), Murray Matheson (Mr. Reynard), Barry Russo (Lt. Alvarado), Clark Gordon (Mr. Nova).

David Vincent discovers that Midlands Academy is being used as an indoctrination center for aliens just arriving on Earth from their native planet.

THE BETRAYED

Writer: John W. Bloch. Director: John M. Lucas. Guest cast: Ed Begley (Simon Carver), Laura Devon (Susan Carver), Nancy Wickwire (Evelyn Bowers), Norman Fell (Neal Taft), Bill Fletcher (first alien), Victor Brandt (Joey Taft).

Employed by oilman Simon Carver, David Vincent discovers a computer complex with a mysterious tape in an abandoned tank car. Unable to convince Carver about the presence of aliens, he then takes the tape to an expert cryptographer, Neal Taft.

STORM

Writer: John Kneubuhl. Director: Paul Wendkos. Guest cast: Joseph Campanella (Father Joe), Barbara Luna (Lisa), Simon Scott (Dr. Gantley), Carlos Romero (Luis Perez), John McLiam (clerk)

Investigating a bizarre East Coast hurricane that veers erratically to spare a fishing village, meteorologist Malcolm Gantley finds evidence of alien intervention.

PANIC

Writer: Robert Sherman. Director: Robert Butler. Guest cast: Robert Walker Jr. (Nick Baxter), Lynn Loring (Madeline Flagg), R. G. Armstrong (Gus Flagg), Len Wayland (Deputy Wallace).

David Vincent races against aliens to capture Nick Baxter, an ailing Invader whose touch is causing an epidemic of freezing deaths. When Nick is cornered, he tries to convince Vincent that he will give him the location of a saucer landing if David will not turn him over to the authorities.

MOONSHOT

Writer: Alan Armer. Director: Paul Wendkos. Guest cast: John Ericson (Hardy Smith), Joanne





Linville (Angela Smith), Kent Smith (Stan Arthur) Anthony Eisley (Tony LaCava), Richard X. Slattery (Riley), Paul Lukather (Correll), Strother Martin (Charlie Coogan), John Lupton (Maj. Banks) Robert Knapp (Lt. Col. Howell).

David Vincent investigates when two astronauts of a three-man team scheduled to blast-off for a lunar landing perish in a bizarre red fog.

WALL OF CRYSTAL

Writer: Don Brinkley. Director: Joe Sargent. Guest cast: Linden Chiles (Dr. Bob Vincent), Julie Sommars (Grace Vincent), Edward Asner (Tangus), Lloyd Gough (Joe McMullen), Russ Conway (Detective Harding), Jerry Ayres (Groom) Peggy Lipton (Bride), Mary Lou Taylor (Mrs. Endicott), Karen Norris (Miss Johnson), Ray Kellogg (Policeman).

To thwart David Vincent from publicizing proof of their presence, the Invaders kidnap David's brother, Dr. Bob Vincent, and threaten his pregnant wife with oxygen destroying crystals.

THE CONDEMNED

Writer: Robert Sherman. Director: Richard

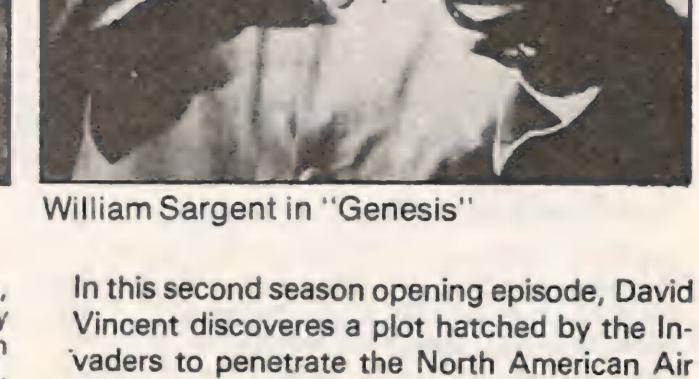
Guest cast: Ralph Bellamy (Morgan Tate), Marlyr Mason (Carol Tate), Murray Hamilton (Lewis Dunhill), Larry Ward (Detective Carter), John Ragir (John Finney), Wright King (Ed Tonkin), Garn Walberg (Detective Regan), Harlan Warde (Ed Peterson), Paul Bryar (Brock).

David Vincent is framed by aliens for the death of communications plant owner Morgan Tate, who is actually hiding after stealing an alien file.

SECOND SEASON: 1967-68

CONDITION: RED

Writer: Laurence Heath. Director: Don Medford. Guest cast: Antoinette Bower (Laurie Keller), Jason Evers (Dan Keller), Roy Engel (Dr. Rogers), Mort Mills (Mr. Arius), Robert Brubaker (Gen. Winters), Burt Douglas (Capt. Conners), Forrest Compton (Capt. Albertson), Jim Raymond (Technician).



Defense Command. THE SAUCER

Writer: Dan B. Ullman. Director: Jesse Hibbs. Guest cast: Anne Francis (Annie Rhodes), Charles Drake (Robert Morrison), Dabney Coleman (John Carter), Robert Knapp (Joe Bonning), Kelly Thordsen (Sam Thorne), Sandy Kenyon (Alien Leader), John Ward (Alien Pilot), Glenn Sipes (Doctor).

Vincent tracks down John Carter, a man who has sighted saucers landing but who has been dismissed as a crank. They soon witness a ship land at the same sight, battle and kill the alien guard, and claim the saucer.

THE WATCHERS

Writer: Jerry Sohl, Earl Hamner Jr. Director: Jesse

Guest cast: Shirley Knight (Margaret Cook), Kevin McCarthy (Paul Cook), Leonard Stone (Ramsey) Walter Brooke (Danvers), Robert Yuro (Simms) Harry Hickox (Bowman), James Seay (Grayson) John Zaremba (General).

A blind girl helps Vincent find the link between electronics wizard Paul Cook and the aliens running a resort lodge.

VALLEY OF THE SHADOW

Writer: Howard Merrill, Robert Sabaroff. Director: Jesse Hibbs

Guest cast: Ron Hayes (Sheriff Clements), Nan Townes (Maria McKinley), Harry Townes (Will Hale), Joe Maross (Capt. Taft-the Alien), Ted Knight (Major), Hank Brandt (Joe Manners), Jon Lormer (Minister).

The inhabitants of an entire town learn of the alien attack when one of the Invaders murders a doctor and is captured by the police. When other aliens arrange a jail break, the murderer is killed. He then goes up in red smoke and his true identity is revealed.

THE ENEMY

Writer: John W. Bloch. Director: Robert Butler. Guest cast: Barbara Barrie (Gale Frazer), Richard



"Summit Meeting"



"The Organization"



"The Believers"



The famous still that came to represent The Invaders

Anderson (Blake—the Alien), Russell Thorson (Sheriff), Paul Mantee (Vern Hammond), Gene Lyons (Sawyer), George Keymas (Lavin). Nurse Gale Frazer, recently returned from Vietnam and weary of witnessing death, sees a saucer crash and tries to help the sole survivor, who is mortally injured and reverting to his native form. Interesting in that this is the only episode that allows us to see the Invaders as they truly are (an *Outer Limits*-like make-up man John Chambers glimpsed mainly in the shadows).

THE TRIAL

Writer: George Eckstein, David W. Rintels. Director: Robert Butler.

Guest cast: Don Gordon (Charlie Gilman), Lynda Day (Janet Wilk), Harold Gould (Allen Slater), John Rayner (Fred Wilk—the alien), William Zuckert (Bert Wisnofsky), James McCallion (Brennan), Russell Johnson (Robert Bernard), Selette Cole (Waitress).

Charlie Gilman, an old friend of Vincent's kills the alien Fred Wilk, but the body incinerates unseen. On trial for his life, Gilman then discloses his love for the alien's very human wife.

THE SPORES

Writer: George Eckstein, David W. Rintels, Ellis Kadison, Joel Kane. Director: William Hale. Guest cast: Gene Hackman (Tom Jessup), John Randolph (Ernie Goldhaver), James Gammon (Hal), Judee Morton (Mavis), Kevin Coughlin (Roy), Mark Miller (Jack Palay), Patricia Smith (Sally), Brian Nash (Mike), Joel Davidson (Earl), Wayne Rogers (Mattson).

A suitcase containing an experimental crop of alien spore "seedlings"—which hatch fully-grown extraterrestrials—becomes the object of a frantic search.

DARK OUTPOST

Writer: Jerry Sohl. Director: George McCowan. Guest cast: William Sargent (Dr. John Devin), Tim McIntire (Hal), Andrew Prine (Vern), Dawn Wells (Eileen), Tom Lowell (Steve), Kelly Jean Peters (Nicole), Whit Bissell (Col. Harris), Susan Davis (Mrs. James).

A new alien weakness is discovered: they are

vulnerable to relatively minor human diseases. David Vincent smuggles himself aboard a departing saucer in hopes of finding a treatment center for these diseased aliens.

SUMMIT MEETING Part One

Writer: George Eckstein. Director: Don Medford. Guest cast: William Windom (Michael Tressider), Diana Hyland (Ellie Markham), Michael Rennie (Per Alquist), Eduard Franz (Thor Halvorsen), Ford Rainey (Jonathan Blaine), Martin West (Lieutenant), Vic Perrin (Hypnotist).

Vincent suspects that the aliens are after Scandinavian Premier Thor Halvorsen, who is hosting a summit conference to deal with a marked increase in the earth's radioactivity. Attractive Ellie Markham soon convinces Vincent that the leaders of the world are being led into a death trap. "Summit Meeting" is the only two-part episode of this series.

SUMMIT MEETING Part Two

Credits: see above listing
At the summit conference, a rocket containing AR-5 will be launched to demonstrate its ability to neutralize dangerous radioactivity.

Vincent learns that the substance, altered by the aliens, will kill all humans present—including the world's leaders.

THE PROPHET

Writer: Warren Duff, Director: Robert Douglas.
Guest cast: Pat Hingle (Brother Avery), Zina
Bethume (Sister Claire), Roger Perry (Bill Shay),
Richard O'Brien (Brother John), Bryon Keith
(Brother James), Dan Frazer (Reporter), Ray Kellog
(Guard).

Prophet Brother Avery's theatrical cultism is drawing larger audiences. The emotional fervor he creates is crowned by a "miraculous" feat—he begins to glow, an alien attribute all too familiar to David Vincent. Avery also happens to be preparing his congregations for the coming of "a host from the skies."

LABYRINTH

Writer: Art Wallace. Director: Murray Golden. Guest cast: Ed Begley (Dr. Samuel Crowell), Sally Kellerman (Laura Crowell), James Callahan (Dr. Harry Mills), John Zaremba (Prof. Edward Harrison), Ed Peck (Darrow), Virginia Christine (Mrs. Thorne), E. J. Andre (Henry Thorne). Vincent secures the chest X-rays of an alien, which he takes to the head of a UFO research project at a university.

THE CAPTIVE

Writer: Laurence Heath. Director: William Hale.
Guest cast: Dana Wynter: (Dr. Serret), Fritz
Weaver (Peter Borke), Don Dubbins (Sanders),
Lawrence Dane (Josef), Peter Coe (Leo), K. L.
Smith (Foreman), Douglas Henderson (Martin),
Robert Patter (Murphy)

Robert Patten (Murphy).
An intruder is caught in the building housing the Communist delegation at the United Nations. His minor wounds are examined by Dr. Katherine Serret and she discovers he is not human. The delegation head, Peter Borke, has heard of David Vincent's alien claims and requests his help. But when he arrives, the alien successfully convinces Borke that both he and Vincent are spies.

THE BELIEVERS

Writer: Barry Oringer. Director: Paul Wendkos. Guest cast: Carol Lynley (Else Reynolds), Than Wyenn (Torberg), Donald Davis (Harland), Kathleen Larkin (Lt. Sally Harper), Rhys Williams (Prof. Hellman), Anthony Eisley (Bob Torin), Richard Karlan (Charles Russelli). (Kent Smith makes his first appearance as series regular Edgar Scoville).

With this episode, THE INVADERS undergoes an important format change—David Vincent, alone up till now in his fight against the aliens, gains permanent allies. He has succeeded in organizing a small group of "believers" who offer financial help, their business and political connections, their active participation—indeed their lives if need be.

THE RANSOM

Writer: Robert Collins. Director: Lewis Allen.
Guest cast: Alfred Ryder (Alien Leader), Anthony
Eisley (Bob Torin), Laurence Naismith (Cyrus
Stone), Karen Black (Claudia Stone), Lawrence
Montaigne (Garth), John Ragin (Kant), Christopher
Held (Lieutenant).



INVADERS CREATOR LARRY COHEN SPEAKS

Larry Cohen, an independent producer whose credits range from more than a half-dozen TV series to the horror film extravaganzas *Demon, It's Alive,* and *It Lives Aguin,* passed through town recently and discussed his SF show's successes and shortcomings with STARLOG.

"The original conception," he recalled," was for a 30-minute nighttime serial. It would be on 2 or 3 times a week. I talked to ABC and they were interested so I wrote the first pilot. By the time we decided to go to an hour, they brought Quinn Martin—QM Productions—into the project.

"Originally, in the first draft of the script there was an orifice or eye or whatever in the palm of the aliens' hand which opened and closed and then disappeared, but that was too much for ABC so they said, 'come up with something else.' So we came up with 'the

pinky' and the regeneration chamber. Then they came up with the raygun and the little disk that killed people and the lack of heartbeat.

Then, of course, they got Roy Thinnes. I had nothing to do with casting and was already losing control because Quinn Martin came in, but I don't think Thinnes would have been my choice. I was looking for someone with a little more vulnerability than he displayed. I think he was extremely cold. Not that he isn't a nice fellow, but actors project certain attitudes and vibes. He's just not one of the warm actors.

"In the meantime I had written 22 story outlines which I gave the company, at which time Quinn Martin said they were discarding all 22. Then they proceeded to film every one of them. I didn't care by then because my main interest was making a good show out of it and getting it on the air and seeing that it was successful. The pilot was quite good, I think."

Investigating a regeneration center, Vincent and his believers take an important alien leader hostage. Soon they learn that their captive is so valuable that the extraterrestrials threaten massive reprisals against Earth if he is not released.

TASK FORCE

Writer: Warren Duff. Director: William Hale. Guest cast: Linden Chiles (Jeremy Mace), Nancy Kovak (June Murray), Martin Wolfson (William Mace).

The Invaders plot to take over the nation's news media, starting with powerful Mace Publications. William Mace, the outfit's patriarch, lends a grudging ear to David Vincent's warning of this plot when it becomes apparent that some outside force is disrupting his magazine empire.

THE POSSESSED

Writer: John W. Bloch. Director: William Hale.
Guest cast: Michael Tolan (Ted Willard), Michael
Constantine (Martin Willard), Katherine Justice
(Janet Garner), William Smithers (Adam Lane),
Charles Bateman (Burt Newcomb).
Tod Willard, an old college ob up of Vincent's

Ted Willard, an old college chum of Vincent's runs a private sanitarium where aliens have been using radio-implants to "program" human beings.

Writer: Laurence Heath. Director: Robert Douglas.

COUNTERATTACK

Guest cast: Anna Capri (Joan Surrat), Lin McCarthy (Archie Harmon), John Milford (Jim Bryce), Ken Lynch (Lt. Conners), Donald Davis (Lucian), Warren Vanders (Earl), Don Chastain (Blake), Pamela Curran (Louise), Charles J. Stewart (Robertson), Ross Elliott (Eliot Kramer). Vincent and his group of "believers" open their first attack on the aliens from space. One of the members has calculated the radio navigational beams used by the Invaders to bring their saucers into Earth's atmosphere, and plans are made to jam the signals, causing the saucers to crash. The extraterrestrials move to block their plan, and Vincent is accused of murder.

THEPIT

Writer: Jack Milner. Director: Louis Allen.
Guest cast: Charles Aidman (Julian Reed), Joanne
Linville (Pat Reed), Donald Harron (Jeff Brower).
When Prof. Julian Reed, one of Vincent's
"believers," claims he has proof of alien infiltration, he is declared legally insane and institutionalized at the Slaten Research Center.

THE ORGANIZATION

Writer: Franklin Barton. Director: William Hale.
Guest cast: J. D. Cannon (Peter Kalter), Chris
Robinson (Mike Calvin).
When aliens take an illegal shipment of nar-

When aliens take an illegal shipment of narcotics destined for crime czar Peter Kalter, the crime syndicate joins forces with Vincent's "believers" to rub out the extraterrestrials. Sounds like fun, doesn't it?

THE PEACEMAKER

Writer: David W. Rintels. Director: Robert Day. Guest cast: James Daly (Gen. Concannon), Phyllis Thaxter (Sarah Concannon).

General Sam Concannon of the Western Hemisphere Command in Washington prefers peace talks to combat. He requests that Vincent arrange a high level meeting with alien leaders to discuss peaceful coexistence.

THE VISE

Writer: Robert Sabaroff, William Blinn. Director: William Hale.

Guest cast: Raymond St. Jacques (James Baxter), Roscoe Lee Browne (Arnold Warren), Janet MacLachlan (Celia Baxter).

A more interesting premise than most. James Baxter, a black serving as an investigator for a Senate subcommittee, is torn between loyalty to his office and his race. Baxter is preparing to recommend appointment of Arnold Warren to an important post in the space program. David Vincent knows Warren is an alien, and has 24 hours to prove this to Baxter. The investigator's wife, however, wants the appointment to go through because Arnold Warren is a black.

THE MIRACLE

Writer: Robert Collins. Director: Robert Day. Guest cast: Barbara Hershey (Beth Ferguson). An alien courier is bitten by a rattlesnake and begins to incinerate before a bewildered onlooker, Beth Ferguson. He thrusts a velvet pouch containing a crystal into her hands, murmurs, "She will come for this," and disappears at the foot of a religious statue in an outdoor shrine. David Vincent must convince the young girl that the Invaders are real, and that the event was no "miracle."

THE LIFE SEEKERS

Writer: Laurence Heath. Director: Paul Wendkos. Guest cast: Barry Morse (Keith), Diane Muldaur (Claire).

The police seek two fugitives—aliens Keith and Claire—who wounded a policeman while speeding to a regeneration center. As the searchers close in, the aliens contact David Vincent and tell them they wish to stop the invasion and need his help.

THE PURSUED

Writer: Don Brinkley. Director: William Hale. Guest cast: Suzanne Pleshette (Anne Gibbs—the alien).

In this semi-remake of "The Mutation," an alien woman is given synthetic human emotions which she is unable to control.

INQUISITION

Writer: Barry Oringer. Director: Robert Glatzer.
Guest cast: Mark Richman (Andrew Hatcher),
Susan Oliver (Joan Seeley).

David Vincent and Edgar Scoville try to warn Senator Breeding that a top government official is an alien. He orders them from his office and as they clear the door an explosion kills him. Andrew Hatcher, a zealot working for the Attorney General, is determined to pin the murder on Vincent and his "fanatical" believers.

We can't get out of it alive, and we've only just begun to look inside it. The Body Human, a continuing CBS series, went as far inside as it's possible to go—and found a world as astounding as any SF scenario. And equally as dramatic . . .

By JAMES C. ODELL

hese dramatic pictures begin your journey on the boundless Red River . . . an expedition inside your own body . . . revealing views of the heart and bloodstream never before seen . . . in a living human being . . . alive in a mother's womb."

So begins the narration for one of the most dramatic science-adventure programs ever to make its way onto home television tubes. With no need to create artificial special effects (with the exception of some photographic imaging techniques that would astound even the most jaded SF film aficionado) outside of the wondrous mechanism that is the human body, The Red River brought before the public some of the mos! astonishing drama in the history of television. The real lives, and real deaths, of real people were at stake—and the camera was as blunt and revealing as cameras have ever been.

The opening segment of the film (which was shown on CBS in the Spring of '78 as part of the continuing The Body Human series) showed the very first motion-picture sequences ever taken inside the human womb. The subject of the footage, an embryo so young—60 days—that its skin was still transparent, was revealed in full color, clinging intimately to the blood flow that nourished its tiny life. And the embryonic heart was seen on screen as well, fluttering and pushing blood through the already-developed system of veins and arteries.

The subject of the program was the human circulation system, and the approach was clinical. And yet, given the seemingly dry subject and the absolutely objective approach to it, the level of drama was so high that several viewers reported having been as moved—and thrilled—by *The Red River* as any program they had ever viewed before. Because *The Red River* documented 4 actual operations on people

who most probably would have died had they not been operated on, the show's tension level was high. And because the photographic and computer imaging of the human body during the surgery was so astonishing, many viewers had the experience of seeing, for the very first time, exactly what goes on inside their own bodies.

The Widowmaker

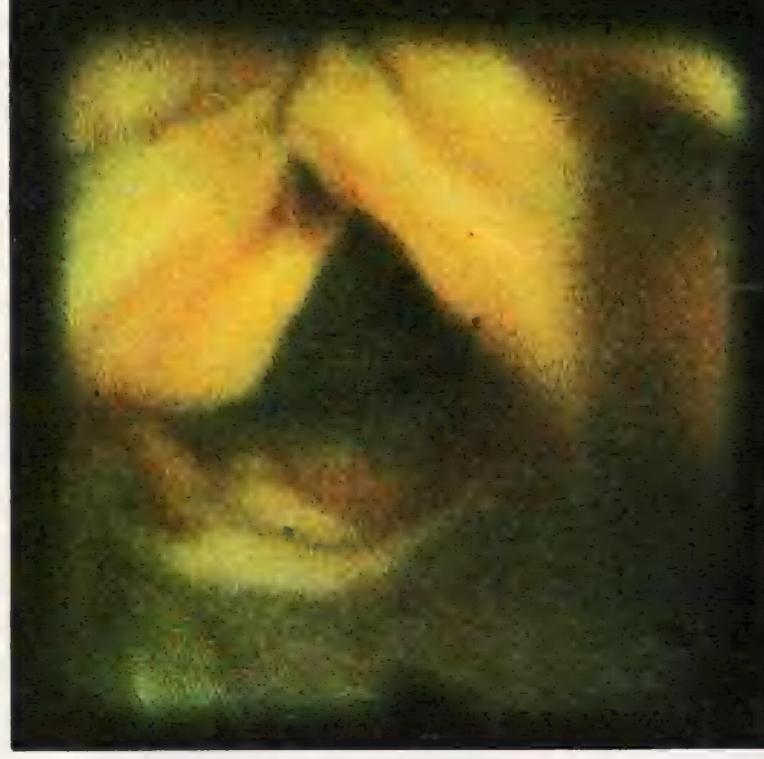
The first case history *The Red River* documented was that of Thomas Cantrell, 41, of Fort Worth, Texas. Cantrell, a writer by profession, could not stand any more than 3 minutes' worth of exercise—or even walking—at a time. This led doctors to suspect that his heart was simply not able to pump enough blood through his body, bringing too little fresh oxygen into the lungs and tissue. Cantrell was virtually a walking vegetable. As seen on camera, Cantrell was brought to one of the living legends of the medical profession, Dr. Denton Cooley, of The Texas

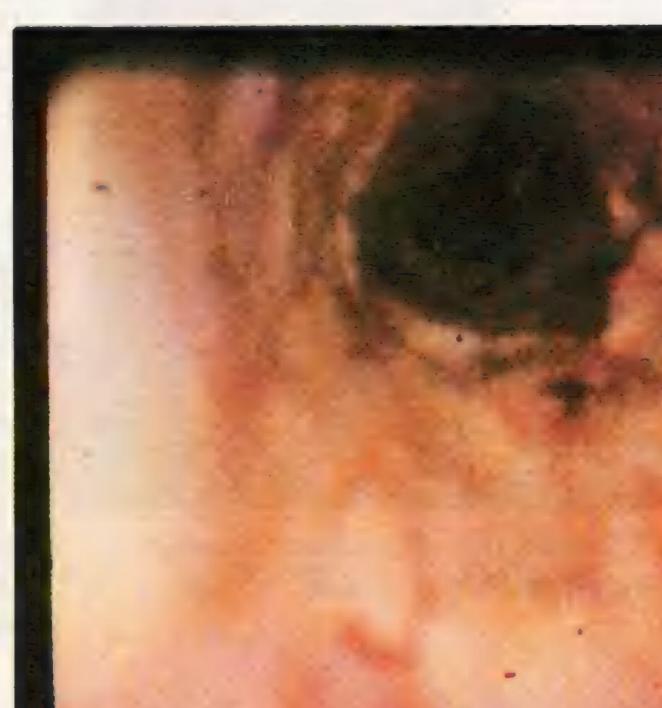
Heart Institute. Cooley promptly diagnosed what is known by doctors as a "Widowmaker"—a blockage of coronary arteries due to fatty deposits. Says Cooley, "When the main artery closes off, the patient's wife suddenly turns into a widow."

Cantrell had not just one, but three arteries blocked. After injecting an x-ray dye into Cantrell's veins, viewers were able to see exactly what Dr. Denton Cooley saw; another complex imaging technique called coronary angiography revealed the exact sites of the blockages. Dr. Cooley prepared for surgery.

The next moments of the show were, literally, heart-stopping. In order to proceed with his plans, Dr. Cooley had to stop his patient's heart, and then slice a vein that had been taken from Cantrell's leg into place in the immobile heart. During the 2 hour and 17 minute surgery, the camera zoomed in for the crucial moments of the bypass operation, during which Cantrell's life hung







Near Left top: What a normal aorta looks like. Near left bottom: the same aorta clogged by arteriosclerosis, a chronic blood disease. Both photos were taken by a fiber-optic lens inside of the artery sending signals to an outside camera—the same technique used in discovering ulcers. Far left: An amazing crosssection photo of the brain used in "The Vital Connection" episode of the series. The cerebellum is on the lower left, the thalamus—relay center for the mind's electrical impulses—is the pink island, and lining the top is the transmitter of our motor signals; the cortex. The pink line shows the path of a wounded signal—one surgeons sought to correct.



At left, Dr. Denton Cooley performs a quadruple coronary by-pass operation on patient Bob Cantrell at the Texas Heart Institute in Houston. Filmed in front of *The Red River* cameras, the operation—while routine—carried a life or death risk for Cantrell.



Above: Robin Phelan, age 6, undergoes major heart surgery under the direction of Dr. Hillel Laks at Yale New Haven Hospital. The task: reconstruct the young girl's heart.

in a precarious balance. The fact that Dr. Cooley had performed similar operations thousands of times before was irrelevant; the patient's life hung by a slender thread.

And the thread was secure. After recuperating from the surgery, Cantrell was shown walking vigorously to work, even skipping a bit for a brief, serendipitous moment. The Red River then went on to describe the actual workings of the human heart and lungs, using another complex imaging technique called "Fiberoptics." No mass audience had ever seen this sort of thing before—their own hearts and lungs, and a guided trip through the walls inside the lungs.

"The pulsing of your heart sets up a perpetual rhythm in the wall of your windpipe. We're now approaching the fork at which the airway turns into your right and left lungs. The lungs are a honeycomb of over 600 million tiny air sacs... and at each air sac oxygen leaves the lungs to be soaked up into the bloodstream." This narration was spoken to the accompaniment of incredible full-color photography, showing the precise, poetic workings of the lungs. The effect was not a little haunting. The walls of the lungs heaved inwards with each breath; red, oxygenheavy blood coursed powerfully through veins, shown close-up and startlingly busy.

"There's No Pulmonary Artery Flow Whatsoever . . ."

The next section of *The Red River* brought viewers the case of Robin Phelan, a 6-year-old girl who was born as a "blue-baby."

The medical problem that leads to this condition stems from the fact that the blood flow between a blue-baby's heart and lungs is completely disrupted. In normal babies, the channel connecting the heart's right half to the lungs is fairly large. This channel,

"The pulsing rhythm of your heart sets up a perpetual rhythm in the wall of your windpipe. We're now approaching the fork at which the airway turns into your right and left lungs. The lungs are a honeycomb of over 600 million tiny air sacs..."

called the pulmonary artery, is crucial to the distribution of fresh oxygen to the blood-stream. Robin Phelan was born with a shrunken pulmonary artery, and in addition there was an abnormally large hole in the wall separating the two halves of her heart. Without an operation, her prognosis was bleak.

The Red River picked up the story of Robin Phelan's troubled life just as she met Dr. Hillel Laks, who was to perform the prodigiously difficult open-heart surgery on her. With a onein-five chance that Robin would never survive, Dr. Laks-with The Red River cameras whirring—began the 8-hour operation amidst real fear and trembling. Rather than having to open a shrunken artery, Dr. Laks discovered (as soon as he opened Robin's heart) that the original artery was beyond repair. An entirely new artery had to be constructed to connect the child's heart to her lungs. The cameras missed very little of the operating room drama.

On-screen animations illustrated the surgical problem graphically, while the narrative returned to actual operating-room footage. The awesome Dr. Laks began an intricate maneuver; a fabric patch was sewn over the hole in Robin's heart.

Following this extraordinarily delicate work, a Y-shaped Dacron tube was attached between the heart chamber and Robin's abnormally small lung arteries. The cameras of director/photographer Robert Elfstrom showed the skilled hands of Dr. Laks actually cradling Robin's stopped heart in his long, slender fingers. In sealing off the hole that existed, an error of even one-tenth of an inch could have easily ended Robin's life.

"The photographer must be constantly conscious of the doctor's feelings and sensitivities—and alert to any possible imminent crisis," says *The Red River's* Elfstrom. "In these cases,

THE RED RIVER

On air: March 6, 1978, CBS Network. Filmed at the Texas Heart Institute, Yale-New Haven Medical Center, George Washington University Medical Center, University of Minnesota Hospital, Gothenburg and Umeo, Sweden. Produced by The Tomorrow Entertainment/Medcom Company

Producer Alfred R. Kelman Executive Producer Thomas W.

WriterRobert E. Fuisz, M.D.
Director and

Photographer Robert Elfstrom Special Photo-

the patients and I really became friends. I was often with the patients more than their doctors were."

Stitch by stitch, the new pulmonary artery was joined to Robin's lung, and the incision was closed. There was no prognosis available at this point, and viewers were left in suspense as to whether the little girl would survive or not. But whatever doubts existed as to the surgeon's skills—and that of the operating team—were soon answered. The first samples of Robin's blood through the newly constructed artery were a bright, life-like red. The girl had come through just fine.

"She's a different person now," says Robin's mother. "She's active for the first time, and her coloring is good. She doesn't lose her breath, and she can keep up with the other kids." The red river, the human body's circulatory system, had again triumphed. Through

the skills of the doctors, the little girl was whole again.

An imaging technique called radioactive scintillography was brought on screen, revealing with far greater detail than ever before possible "beautiful pictures of your heart." In this process, the human circulation system is seen actively at work, from the insideout. This and other new imaging processes make the work of modern-day doctors far easier. In the past, 'exploratory' operations were sometimes necessary to determine the very same symptoms and ailments that are now diagnosed through internal computer imaging.

The last two cases studied in The Red River, while less dramatic, also brought evidence of the crucial interplay between life and death that surgeons deal with today in open heart and brain surgery. The journey that the red river, the circulatory system, makes throughout every second of human life was studied in close detail from inside the patient's bodies. In the course of filming the program, four people were saved, four human beings went on to continue healthy, active lives. Other new imaging techniques inside the human body were shown, and other extremely delicate operations filmed.

The Red River episode was part of the ongoing The Body Human series on CBS. By presenting an unparalleled view of the inner universe, the human body, the series will satisfy anyone accustomed to turning his or her gaze outwards, to the planets. There are as many unknown, mysterious, and astounding faces of the inner world as exist in the outer; the lives of cells, tissue and other minutiae are as fascinating as the lives of the celestial bodies—and of far more immediate concern to human life. But the attraction of the human body, and in particular The Red River's filming of it, is irresistible. It is within us all . . .

STATE OF THE ART

IMPLICATIONS IN STAR WARS

ne of the skills in science-fiction writing is the ability to create 'implications.'

An implication is a fact within the story that is shown not in itself, but in its effects on the characters, the plot and the environment in which the story takes place. For instance, the fact that Mr. Spock is half-human, half-Vulcan is a direct statement that humans and Vulcans can interbreed—but beyond that, knowing that Vulcans are compulsively logical, it is also an implication that there must have been a very good reason for Sarek to marry Amanda. (In STARLOG #8, I postulated that the implication was that Spock was originally conceived as a Vulcan experiment to see if the human race could be improved as a species by the infusion of Vulcan genes into our genetic pool.)

Of course, Star Trek is full of implications. Put two or more Star Trek fans into a room and they can talk for hours about the implications in the 79 episodes of the show—that's part of what Star Trek conventions are all about.

Every good science-fiction work—whether book, story, film or TV episode—has implications. The writer or director doesn't have time to show or explain everything there is that made up the world he's telling you about, so he adds details, lots of them, that imply the larger world beyond the immediate scope of the story. The better a job he does at creating implications, the more real the environment of his story will seem to be.

Which brings me to Star Wars—a work that is so chock full of implications that you can watch the film for its implications alone. It is the presentation of the details that makes Star Wars such a successfully realized work. For instance, almost all of the technology we see in the picture has a "used" look—it isn't brand new, fresh out of the showroom; instead, it's battered and bashed, rusted and rotted. Luke Skywalker's land-speeder re-

minded me of the front cover of a 1959 issue of Strange Adventures comics in its design—but in its realization, it was closer to an ancient Mustang convertible I was once in love with.

Along about the umpteenth time I sat through Star Wars—

(—Look, I know it's fashionable for the big names in science fiction to put down *Star Wars* as "mindless space opera"— which in one sense it is—but in a larger sense, it's *fun*, and I subscribe to the theory that there are times when the human body *needs* burgers and junk food simply because they are fun. Yes, I could tell you all of the nitpicking little things that I and forty-three other science-fiction writers think are wrong with the picture, but why bother? I liked it, and I'd rather talk about what was right with it—)

Along about the umpteenth time I sat through *Star Wars*, I began to think about some of its implications, and I will share them with you here. (One caveat—these are my own musings. I am no longer a practicing mind reader, and I make no claims that George Lucas or anyone else in the production

crew consciously intended these implications. These are merely some thoughts that occurred to me upon repeated viewings of the film.)

1) We are told that C3PO is a protocol droid. This is most probably why he has been designed in a humanoid form—because he is intended to work primarily with human beings. Throughout the film, we see other similarly-designed droids. Probably, they too are protocol droids. Most of them share C3PO's design. But, occasionally, we see protocol droids that do not have humanoid features there's one in the Jawa sand-crawler, and another walking past the elevators in the Death Star. Both of these protocol droids have non-humanoid features; in fact, they are distinctly insectlike. The one in the sand-crawler even speaks a very unhuman language. The implication here is that there is an insect-like species that these droids were designed to deal with. We never see any members of this particular species, but the implication is that protocol droids are cosmetically designed to resemble the species that they will serve. A minor implication perhaps, but inescapable—why else would these droids have insect-faces?

2) The Dia Noghu—the beast in the Death Star's trash masher—how did it get there? Remember, the Death Star is a completely artificial world. It was built in space—it should have no life forms aboard it except those that were intentionally brought aboard. It should have no ecology of vermin living within it because they would have very little way of getting aboard the Death Star or surviving aboard it once they arrived. (What would they eat, for instance?) The Dia Noghu is there for a reason—or it is there by accident.

It does not seem to have a real purpose in the trash masher—other than to menace Luke Skywalker—therefore, the implication is that its presence there is accidental.

EDITOR'S NOTE—Mr. Gerrold has been given a free hand to express any ideas, with any attitudes, and in any language he wishes, and therefore this column does not necessarily represent the editorial views of STARLOG magazine nor our philosophy. The content is copyrighted © 1978 by David Gerrold.

A Column by David Gerrold



Is it possible that the Dia Noghu is the Star Wars equivalent of somebody's pet alligator? When it got too big to keep, the owner just flushed it down a "toilet" and it ended up here in the sewers of the Death Star—i.e. the trash masher—where it has grown immense feeding upon the garbage and detritus of the Death Star's daily processes. To the Dia Noghu, Luke Skywalker is just another piece of flotsam and/or jetsam to be fed upon. When it hears the warning "clunk" that the trash masher is about to start compressing things, it exits via one of the compartment's drain pipes. Apparently it has learned to recognize that "clunk" as a warning, the same way a cat learns to recognize the sound of a refrigerator door opening.

3) We are told that Darth Vader is one of Obi-Wan Kenobi's former students, one who was seduced by "the dark side of the Force."

The implication here is that the Force can be used for good or for evil. But there is another implication as well that must be considered: Darth Vader is Obi-Wan Kenobi's greatest mistake.

Somehow, Obi-Wan Kenobi failed to teach Darth Vader how to use the Force for good instead of evil—or the seductiveness of the dark side of the Force is very very strong. In either case, that Darth Vader did not learn all of the lessons that Obi-Wan tried to teach him is obvious.

This implies the possibility that it is Obi-Wan Kenobi's responsibility to punish/stop his former student himself. If so, then it follows that Obi-Wan has been waiting for the proper moment to act. A number of pre-conditions must be met, a number of destinies must intertwine: Obi-Wan Kenobi is waiting for Luke Skywalker; he is waiting for the droids, C3PO and R2-D2, to flee with the Death Star plans; he is waiting for the moment when their paths cross Luke's; he has been waiting to give Luke his father's light-sabre; and ultimately, he is waiting for the moment when Luke will say, "Teach me about the Force."

After all, just what else is the old guy doing out there in the desert?

I mean, with all his skills and

knowledge, he should be trying to resurrect the Jedi Knights, shouldn't he? Or does he know that this particular moment in that far-off galaxy's history is a crucial nexus point? The implication—and it seems a fairly obvious one—is that it is Obi-Wan Kenobi's destiny to insure that Luke Skywalker is properly equipped to meet his destiny.

After all, doesn't he show up at just the right time to save Luke from the sand-people?

This leads right into the next point:

4) Somewhere, in the vast bulk of publicity and interviews that came out in the first rush of the film's success, was the mention of George Lucas's original conception of Obi-Wan Kenobi as a kind of a crazy old hermit—something like grizzled old Ben Gumm in Treasure Island. Alec Guinness had doubts about that kind of characterization, and in subsequent discussions with George Lucas, Obi-Wan Kenobi evolved into a more mystical and stately character.

This characterization, however, carries several implications of its own.

One of the possibilities, is that Obi-Wan is never really there at all.

Luke's Uncle Owen for instance, says, "I don't think that man exists anymore. He died about the same time as your father."

When Luke tells this to Obi-Wan, the old man rolls his eyes heavenward before saying, "Oh, he's not dead. Not yet." There's *something* about the way he says it . . .

When Obi-Wan and Darth Vader finally come face to face, Obi-Wan tells Darth Vader, "You cannot win, Darth . . . if you cut me down, I will become more powerful than you can possibly imagine."

And finally, Obi-Wan Kenobi raises his light-sabre to his forehead in a mystical salute—a "we-who-areabout-to-die" gesture—and Darth Vader strikes him down—except that Obi-Wan has disappeared completely! All that Darth Vader has struck down is Obi-Wan's empty cloak.

The implication here is that Obi-Wan has never been completely *here*, he has only been a manifestation of the Force

working to bring Luke Skywalker to his destiny. Obi-Wan has long since passed on to a higher plane of existence and only returned now for this specific event in Galactic history. Luke continues to hear Obi-Wan's voice at crucial moments of decision—especially at the end of the picture when Luke must "use the Force." It's my own theory that Obi-Wan is a direct manifestation of the Force. But if that is the case, then that also tells us that the Force is capable of appearing as a tangible manifestation in order to cause an event to occur a specific way—in this case, for good instead of evil. Therefore, we are presented with the possibility of an "activist God" who will step in when necessary to work miracles.

The implication of *Star Wars* is that the Force is not impersonal. It *cares*.

—all of which brings me to:

5) The missing scene in Star Wars.

There is a scene that George Lucas never wrote—but it is as necessary to the story as all of the scenes he did write.

It is implied in everything else in the story, and I suggest that whether or not it is shown on the screen, it must have occurred.

When Luke Skywalker discovers that his Uncle Owen and Aunt Beru have been murdered by the Imperial Storm Troopers, he returns to the Jawas' shattered sand-crawler and says to Obi-Wan Kenobi, "Teach me about the Force." (At this point in the picture, those members of the audience who have seen the picture a few times sometimes applaud wildly.)

The next scene we see on screen is Luke, Obi-Wan and the two droids in Luke's land-speeder, racing across the desert. We do not see Obi-Wan teach Luke about the Force at all. Once aboard Han Solo's ship, *The Millennium Falcon*, we see Luke practicing a battle exercise in which he must learn to trust the Force, but at no point have we seen Obi-Wan actually *teach* Luke how to tune into the Force itself.

The missing scene should occur right after Luke says, "Teach me about the Force." We should see Obi-Wan

(continued on page 66)



For centuries, puppets have captured the imaginations of young and old alike. Since the traveling "Puppet Theaters" of the Middle Ages, the puppeteer has found himself in the role of inventor—creating new, exciting visual effects to capture the audience's imagination. In the 1960s Gerry Anderson created a media "puppet empire" with his dazzling worlds of tomorrow in which electronic marionettes fought alien invaders, saved people from disaster and explored the unknown reaches of outer space.

By DAVID HIRSCH Series Edited by DAVID HUTCHISON

erry Anderson never planned to make puppet films. He and Arthur Provis created A.P. Films in 1955. After a number of months of waiting for that multi-million dollar offer they had dreamed about, the two men sadly realized that no one was going to give them \$20 million to make another Ben-Hur or Wizard Of Oz. With their bank accounts at rock bottom, the duo found themselves working for other people in order to keep the studio at Islet Park open. A.P.F.'s future looked pretty dark until one day, Roberta Lee and Suzanne Warner of England's Associated Redifusion Television Company offered the two men the chance to make a series for their company.

Anderson and Provis were so excited by the chance to make a series on their own that they forgot to ask the two women some key questions. In their own eyes, they saw themselves in 'the big time,' but what they didn't realize was that they were being contracted to produce 52 quarter-hour episodes of a series called *The Adventures Of Twizzle*. To their horror, Anderson and Provis discovered that they were expected to crank out one episode a day

STARLOG gratefully acknowledges Robert Mandell, Donna Lipman, Don Mead and his assistant Neil of ITC Entertainment for their invaluable assistance in researching the material for this article.

This is the eleventh part in STARLOG's feature series on Special Effects. Part I—The Use of Miniatures appeared in issue No. 6. Part II—Robby the Robot appeared in No. 7. Part III—Model Animation appeared in No. 8. Part IV—Magicam appeared in No. 9. Part V—How To Roll Your Own appeared in No. 10. Parts VI & VII—The Makeup Men appeared in No. 11 & No. 12. Parts VIII & IX—The Matte Artist appeared in No. 13 & No. 14.

in 35mm black and white for the incredibly small sum of \$825 per program. Even worse, their "star" was a papier - mâché marionette called Twizzle who had the wondrous ability to extend his legs.

Unfortunately, the per episode budget limited not only Anderson and Provis, but the marionettes, too. They were without movable eyes and mouth and were controlled by poorly concealed carpet thread. Sets were only painted backdrops without props. So time consuming was the production that the crew had to break many union rules by working up to 15 hours a day to complete each episode. Most of the time they were forced to use the first take (regardless of the quality) in order to keep on schedule.

Somewhere amidst the chaos they did something right.

"The only thing I can say about Twizzle being a success" recalls Anderson, "was that we were immediate-

ly asked to do another series for Roberta Lee entitled *Torchy The Battery Boy*. By this time we were really becoming very, very tough businessmen and we insisted on a budget of \$1,400 per 15 minute segment. At the time, that, too, was a pretty tight budget, but it enabled us to make some fairly substantial advances in the technique of filming."

Wood was now used to construct the body. Moveable mouths were added to the heads. Cardboard cutouts provided a three-dimensional effect on the sets. As in Twizzle, all character dialogue was pre-recorded and the puppeteers listened to the tape and moved the puppet accordingly. This method had one serious drawback born out of the simple fact that A.P. Films could not afford to house itself in a proper studio. Anderson and Provis had set up shop in an old mansion in Maidenhead on the banks of the Thames river. Lack of space forced them to set up the carpentry shop in the same ballroom they had used for shooting. Whenever the carpenter started up the circular saw to construct a new set, the puppeteers couldn't hear the dialogue playback. Every time Gerry asked for quiet the carpenter made it clear that if he didn't

Gerry Anderson's Space Report has been incorporated into this issue's SFX installment on Supermarionation. The Space Report will reappear in the next issue.



Mary Turner and Christine Glanville (far right) led the team of puppeteers through ten years of Supermarionation series.





(Left) Inside the puppet workshop. Judith Shutt works on a face, John Blundell assembles a body, Mary Turner fixes a puppet's hair, and a technician uses duiling spray on some wires. (Above) The perfectly proportioned puppets.

continue to work, the next set would not be ready in time for shooting. Any setback would cost money.

"It was a very bad winter that caused the Thames river to burst its banks and Islet Park became an island almost slam bang in the middle of the river. Fortunately, the building had been built upon high footings. The interior of the mansion remained dry although the building was surrounded by water. Every morning we had to cross the river to get to work by rowboat and at night we used to wheel all the studio lights out onto the balcony to light up the stretch of the Thames that we were going to cross. All but one of us would get into the rowboat and row like hell to get across because it was a pretty strong current. We used to draw lots, and one of us would stay behind to turn the lights out and row himself, in a smaller boat, in complete darkness. Many a night the last man would get swept by the current into the flooded woods. Sometimes it would be as long as an hour before he got himself to dry land."

As with the Adventures Of Twizzle, Torchy was well received by young audiences. Anderson was quite pleased with the vast improvements, such as the use of fiberglass in constructing fruit-shaped houses for Torchy and his friends with their miniature furniture. Torchy, as the name might imply, had a lamp in his hat that produced a magic beam which could do many wondrous things.

After completing Torchy The Battery

Boy, Anderson and his partners decided to gamble on a production of their own. Risking almost every dollar they had made from the two previous series, they produced a 30-minute pilot at a cost of nearly \$10,000. Every penny was channelled into the development of new techniques to be utilized in bringing the puppet films closer to real life.

The title of the pilot was Four Feather Falls and among its many "firsts" was the fact that it was the first puppet series to use the major Supermarionation development of electronic lip-sync. Up to this point in time, it was difficult to properly control the marionette during dialogue sequences. While the puppeteer was attempting to open and close the puppet's mouth in sync with the dialogue, the puppet's head would bob up and down. Gerry wanted to free the puppeteer from this chore so that the puppeteer could concentrate on body movement. The puppet could not walk and talk at the same time.

To seek an answer to this problem, Gerry and his technicians approached two British companies, in 1958, that had a long association with recording and electronic work, R.T.C. Wright and Company, Ltd. and the Hollick & Taylor Recording Company, Ltd. Hollick developed the control system that would record the character voices and Wright assisted in developing the lip-sync device that would move the puppet's mouth.

Before the start of each episode, the

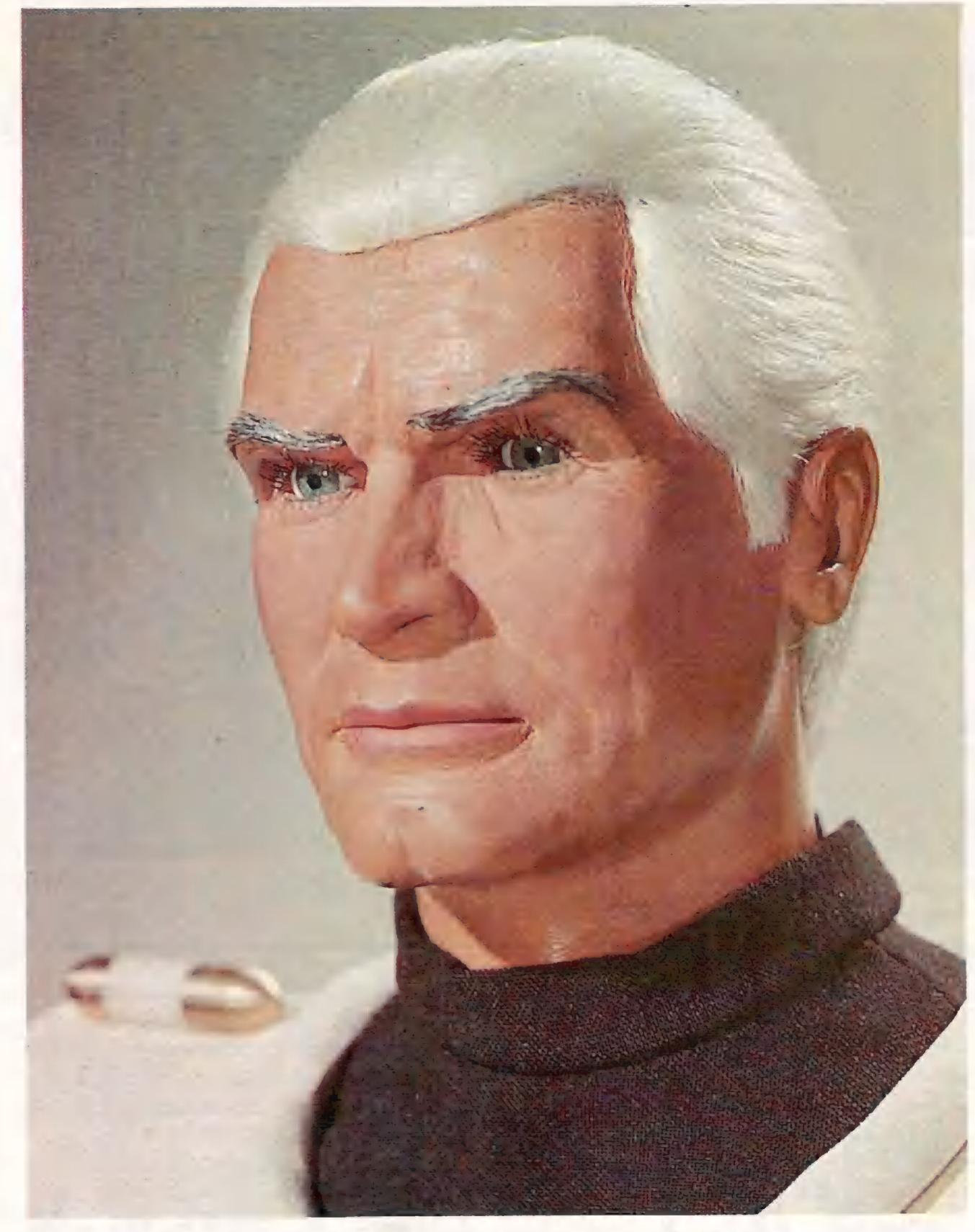
actors recorded their dialogue. Then, at either the recording studio at A.P. Films or the Gate Recording Theatre, the tape was edited down to its proper time for each sequence to be filmed. Pauses, especially necessary when one actor was dubbing for more than one character in the same scene, had to be cut down to a suitable length. Once that was done, the recording was transferred to a quarter-inch master tape.

A dupe of the tape was played during the filming and the electronic pulses created by the voice levels on the tape operated the solenoid cell in the puppet's head. The cell, which is an electromagnet activated by the voice impulse, drew the mouth open. A simple spring drew it closed.

"The adjustment of the mouth was very very critical because if the mouth didn't open enough, then one was not aware of the mouth movement and it looked as if we were back to the days of *Twizzle* where the head would move, not the mouth. On the other hand, if the mouth opened just a fraction too much, immediately the character looked like a ventriloquist's dummy."

Additional improvements were made in the puppet's appearance. Fiberglass was used in the construction of the head. The lightweight material also allowed room in the hollow head for the lip-sync electronics and a device that allowed the puppet's eyes to swing back and forth.

Carpet thread, used in the first two series, was abandoned for a much finer control line. Cotton was rejected



A vast amount of time and effort is invested in the creation of the face of a regular character. Many times early conceptions are scrapped until the facial features project the personality of the character. (Col. White: Captain Scarlet.)

because it broke easily. Nylon was rejected because it was visible under the lights. It seemed impossible to find a material that was strong, but fine enough not to be visible on TV. In a moment of frustration Anderson proposed that all TV cameras should scan vertically instead of horizontally—that would solve the problem. He finally settled upon tungsten wire—with a thickness of .005 of an inch; the wires became invisible on the TV screen.

"Reg Hill, art director for the show, built a fabulous Western street in scale to the puppets. It had a very special magic being that it was in miniature, 1/3 normal size. At the time I remember miniature scotch bottles were something very new, today you can get them on any aircraft, but back then it was something of an innovation. We searched quite a bit because our miniature saloon had to have its shelves stocked with row upon row of bottles."

Within the space of two weeks the gamble paid off. Granada Television

bought the pilot and ordered 52 half-hour episodes. The series was simulcast over the British network and became A.P. Films first major success.

'Although we now had a respectable budget, we weren't in the big time by any stretch of the imagination. For example, we couldn't afford opticals. When anybody fired a gun in the picture (guns were fired quite a lot) we would get the puppet to raise the gun, give it a little bit of a jerk for the recoil, and then later on the negative, we would take black ink and place it on the tip of the gun for two or three frames. In positive it would give the gun a flash."

After completing Four Feather Falls, Anderson produced another pilot in 1959 entitled Supercar. The pilot was bought by another British television company called Associated TeleVision (ATV). Supercar became the first Supermarionation series to play in the United States. Distributed worldwide by ATV's distribution arm, the In-

dependent Television Corporation (now ITC Entertainment), the series became a hit around the globe. Anderson's dream of seeing his puppet films alongside the big budget live action programs was beginning to look as if it would become reality.

With 39 episodes of *Supercar* playing around the world, Anderson's next series, *Fireball XL-5*, was carried across the States on the NBC-TV Network. The success in ratings and merchandising opened a new door for Supermarionation.

With the success of each series came an increase in budget and the development of newer and better methods of production. To aid the puppeteers in their work, a television monitoring system was developed. Closed circuit TV cameras were placed behind each 35mm film camera, looking through the viewfinder. Whatever action was to be shot by the cameraman could be viewed on special monitors. The puppeteers, who once practiced while looking into a mirror, could now observe the action on the monitors without the confusion caused by a reversed image, because the picture on the special monitor was electronically turned around, duplicating the effect of a mirror.

Background projection was first introduced into the Supermarionation series with Supercar. Since the budget did not allow for expensive optical work for all the scenes that called for Supercar to be in motion, the special effects crew discovered that by simply placing the model before a screen and then rear-projecting an image of a moving background, they could get a pleasing effect at a fraction of the cost and time. Before the filming of the series began, 20,000 feet of sky footage had to be shot for Supercar's flight scenes.

The aerial footage was shot in 35mm as were all the programs themselves. After the audio tracks were added, the lab reduced the film to 16mm for TV transmission.

Adding to the visual excitement of the series was the use of scaled-down signal rockets custom-made for A.P. Films. The rockets were utilized to simulate real rocket motors on the Supercar and Fireball XL-5 craft and could be electronically detonated on cue by a special-effects man.

The third series for ATV and ITC, Stingray, was another major turning point in Anderson's career. Stingray holds the honor of being the first color television series to be made in the United Kingdom. As with Firehall XL-5, the marionettes began to take on a more lifelike appearance. The marionette 'regulars' were sometimes

modeled after the actors who would supply their voices. The character of Atlanta Shore in *Stingray*, for example, was modeled after actress Lois Maxwell (Miss Moneypenny of the Bond films) who dubbed the voice.

As production techniques became more elaborate, the crew gladly abandoned their hand-built studio for a new, fully-equipped studio several times larger than their original establishment. They now had room to expand in any direction they wished to go. The new studio was as complete as any live action studio, except that it was a world in miniature with actors only about 22 inches high.

The newly designed settings placed fresh demands on the prop department, which had to be prepared to manufacture anything—furniture, jewelry, crockery, guns, lamps (that had to work!) and other properties all made to exactly one-third life size.

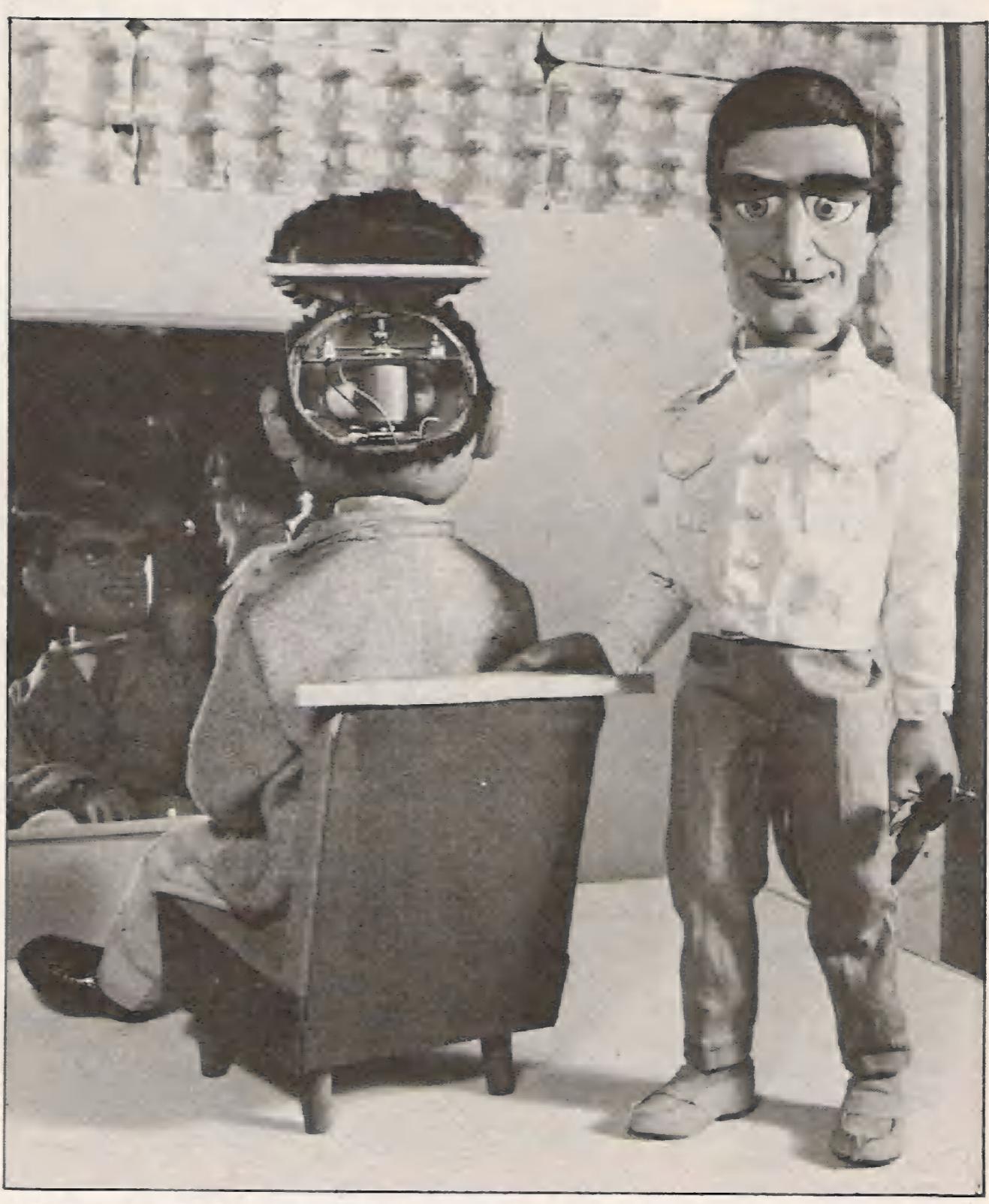
The experience gained in the last six years had given the A.P. Films team the know-how they needed. The new studio was completely self-contained with seven full-sized cutting rooms, a large prop department, a scene dock, carpenter's shop, and paint shop. There was a dressmaking department where hundreds of miniature costumes were made by hand and a puppet workshop where each of the puppet actors and actresses were made.

To add more realism to the puppets, the workshop created a number of heads for each character each showing a different emotion. More than anything, however, the mobility of expression came from the eyes. Specially made "glass" eyes—actually made of plastic materials—similar to those manufactured for people were made by an optical expert. The iris & pupil were taken from a closeup photograph of a real eye. The lifelike result could not only move left and right, but up and down as well.

Human hair was used to add to the real-life image. Every night, the female puppets had their hair set in curlers to keep the natural wave.

The puppeteers worked from mobile bridges 6 feet above the new enlarged sets. The TV monitor system extended around the studio. As a time-saver, if Gerry was planning a new episode with the writers in his office and he was needed to give advice on a scene about to be shot across the studio, all he had to do was switch on his monitor and intercom in the office to communicate with the people on the set.

In 1964, Anderson found himself finally in the big time. With four world-wide smash hits behind him, he decided it was time to bring his puppet films to adult audiences as well. Up to that



Mike Mercury, the heroic test pilot created for the second Supermarionation series, Supercar demonstrates the lip-sync and eye mechanism.

point, all the Supermarionation productions were slotted during the daytime hours for the young audiences. Anderson now wanted to produce a series for the evening crowd.

With Thunderbirds, he found the ultimate format. Unlike the earlier programs, Thunderbirds ran a full hour and cost between \$60,000 and \$70,000 to produce each episode. More models were used during the 32-episode run than in any of his other series. The five Thunderbird vehicles had no less than 200 different scale representations, ranging in sizes from six inches to eight feet. Some representations were sections of the craft that displayed a special function. For the transporter craft, Thunderbird 2, a three-foot-long nose section was constructed for scenes that required the craft to rise on hydraulic telescoping legs to allow the cargo pod's door to open and release the scale model inside. Thunderbird 3, the spaceship, had a six-foot-tall version for closeups of the craft in its launch silo.

With more elaborate effects required, two teams of production crews had to work at the same time. To do

this, every regular character had an identical twin so that if two different scenes being shot simultaneously required the character of Jeff Tracy, then each puppet would go into action and the viewer wouldn't be able to tell the difference between the two. Duplicate expression heads were also created.

While the 13 puppets that comprised the main cast and their twins were still made of fiberglass and wood, the "guest star" puppets were made in the same way except that they were faceless. They had eyes and mouths, but no other features and the new faces were sculpted on the former for each new episode. Successful "guest stars" were kept and placed in a library of characters. They even had a small version of the American Players Guide for reference purposes.

Creating the large cast for Thunder-birds was a long and difficult task since the creation of even one character is time consuming. First, the heads are sculpted in clay, then painted so that some idea of the face's ultimate appearance can be judged. If luck is with them and the face turns out right the first time (generally it doesn't), the



Cameraman Julian Lugrin (right) double-checks the set before shooting the scene.

The Adventures of Twizzle (1956)

First puppet series for Gerry Anderson

Torchy the Battery Boy (1957)

First Anderson production to use moveable eyes and mouth. Thinner wires. Four Feather Falls (1958)

First Supermarionation production. Introduced the electronic lip-sync. Supercar (1959)

First Gerry Anderson production to be syndicated in America.

Fireball XL-5 (1961)

Only Supermarionation series to be carried by major network (NBC-TV). Stingray (1962/63)

First color film series made in England. Introduced faces modeled after actors who supplied voices.

Thunderbirds (1964/66)

Only one-hour puppet series and the most popular. Spawned two feature films. Thunderbirds Are Go! (1966) and Thunderbird Six (1968).

Captain Scarlet and the Mysterons (1967)

First use of perfectly proportioned puppets and "stringless" marionettes. Joe 90 (1968)

First attempt to develop action through characters, not model effects. The Secret Service (1969)

First attempt to combine live action with puppets on a large scale.

Alien Attack (1977)

First Supermarionation production in 8 years combining the techniques developed for Captain Scarlet and the visual effects developed for Space: 1999.

THE SUPERMARIONATION TEAM

Gerry Anderson

Creator, Producer, Director

Reg Hill

Associate Producer, Art Director

John Read

Director of Photography

Sylvia Anderson

Character Visualization, Voice Artiste, Script Supervision,

Co-creator and Producer

David Lane

Director, Producer

Desmond Sanders

Director, Production Supervisor

Alan Pattillo

Script Editor, Writer and Director

Derek Meddings

Supervising Special Effects Director

Bob Bell

Art Director

Christine Glanville and Mary Turner Puppetry Supervision

Brian Johncock (Johnson)

Special Effects Director

Barry Gray

Musical and Sound Effects Composer/Director

next step is to copy the face in the form of a fiberglass shell.

After attaching the head to a plastic body that approximates the correct figure, the puppet is wired and tested from a 12-foot gantry. The balance of a puppet is very important. The weight has to be distributed just right, for if the figure is too heavy it will require control wires visible to the camera as well as create a strain on the puppeteer. If the puppet is too light, it will not respond properly to control.

If the puppet passes the weight test, it is then sent to the wardrobe department for dressing and any detail changes required on the face.

The puppet workshop utilized a material called Bondglass for the construction of the heads. Similar to the type of glass fibercloth and polyester resin used in the construction of fiberglass car bodies, the smooth cloth material is inserted into a plaster mold of the face. The constructor of the figure then laminates the material, putting on various layers of cloth, each soaked in the resin. Dry an hour later, the color of the face was a natural beige.

If the people involved in building the puppet characters were pressed for time, the effects crew had even less. Directors of Photography John Read, or in the case of special effects, Harry Oakes, found themselves struggling with depth of focus problems. The large sets for the series were about 10 feet in depth, but some of the special effects sets were as deep as 25 feet. On an exterior shot, depth of focus had to be maintained from the immediate foreground to the horizon. Standard lenses were unusable under normal conditions. The only solution was to stop down and illuminate at a higher level. Even so, the two men had to bring their cameras within two feet to get the proper image. Lighting was also a problem for the crew shooting special effects work when the camera speeds were 120 frames per second. The models had to be shot under five times the normal illumination for live-action.

When scripts called for scenes that could not work in miniature because the puppets were limited in some way, they were shot using life-size sets and live actors. Supercar used human hands to turn knobs and pull switches in closeups. For Thunderbirds, things were a little more elaborate. For the pilot episode "Trapped in the Sky," the script required a character to board the landing leg compartment of an aircraft to dismantle a bomb, while in mid-flight. The character was supposed to jump from a glider under the aircraft and grab hold of a pipe. An actor, dressed in a flight suit and helmet identical to the puppet's, was used in the close-up scenes that required two hands to grab the pipe tightly, simulating the idea that the man is hanging

onto a pipe over an open hatch and the ground is thousands of feet below.

However, when the same script called for a machine gun barrel to appear from behind a Rolls-Royce radiator grill, the effects crew found that it was more economical to convert a lifesize radiator shell, than to build one to scale. The largest model of Lady Penelope's famous shocking pink Rolls-Royce was seven feet long, large enough to seat the puppets inside. (In May of 1968, a full-scale, fully-operational version of the Rolls was unveiled in England.)

As a result of *Thunderbirds*' tremendous success on television, Gerry produced two feature films, *Thunderbirds* Are Go! in 1966 and *Thunderbird Six* in 1968.

With the production of the sixth Supermarionation series, Captain Scarlet and the Mysterons came another change. The new series introduced marionettes that were in correct human proportions. The larger heads with their cartoon-style stereotyped faces were gone and the eyes reduced to half their original size. More than ever, the technical crew was closer to achieving a real-life look. After ten years, the production crew had developed their work into a science. Sets were now so realistic that, without the puppets, they could pass for full-scale rooms.

Five camera crews were employed to work full-time with over twelve puppeteers to complete one episode every two weeks. Many new techniques were introduced after careful research. There were scenes in which the puppets were controlled without wires. The development of this technique came about when the Angel Interceptor aircraft were created. The pilot had to be in enclosed cockpits to achieve the most realistic effect possible, so the puppets were controlled from below. It was rather simple to arrange, since all the pilots had to do was to move their heads and arms slightly.

Although they may have been closer to perfection now, the marionettes were still plagued by a major problem that had followed them since *Torchy the Battery Boy*.

"We'd set the shot up and then find out that one of the eye wires had snapped. The puppet would immediately go cockeyed and you had to take the back of the head off. It's very intricate work to reach the eye mechanism and tie the wire so that it doesn't break again. Then you have to put the head shell back into position, and of course, redo the hair completely. This can take an hour and when you have a unit hanging around, this is a long time to lose. A lot of money is lost."

Joe 90 followed Captain Scarlet in 1968. Unlike the previous Supermarionation production, Joe 90 relied more on its characters instead of ex-

plosions and a multitude of model work. Combined with beautifully detailed sets and exciting story lines, *Joe* 90 played through 30 episodes.

It was at this time that Gerry Anderson began to consider switching to live action. As he prepared his first live action film, Doppelganger (known in America as Journey To The Far Side Of The Sun), he filmed his last and most unusual Supermarionation series to date.

The Secret Service was a combination of puppetry and live action. In the earlier productions, live action was only used on a very limited basis, but for The Secret Service, much of the exterior scenes involving long shots are done live. British actor Stanley Unwin not only loaned his face, name, and voice to the main character, Father Stanley Unwin, but he doubled all the live action sequences. The technical crew even constructed a replica of a real car in perfect scale. In long shots, the real Unwin would drive his old Model T Ford down the M1 motorway while the puppet Unwin would "drive" his Model T Ford in closeups in the studio.

The combination provided an interesting 13-episode series.

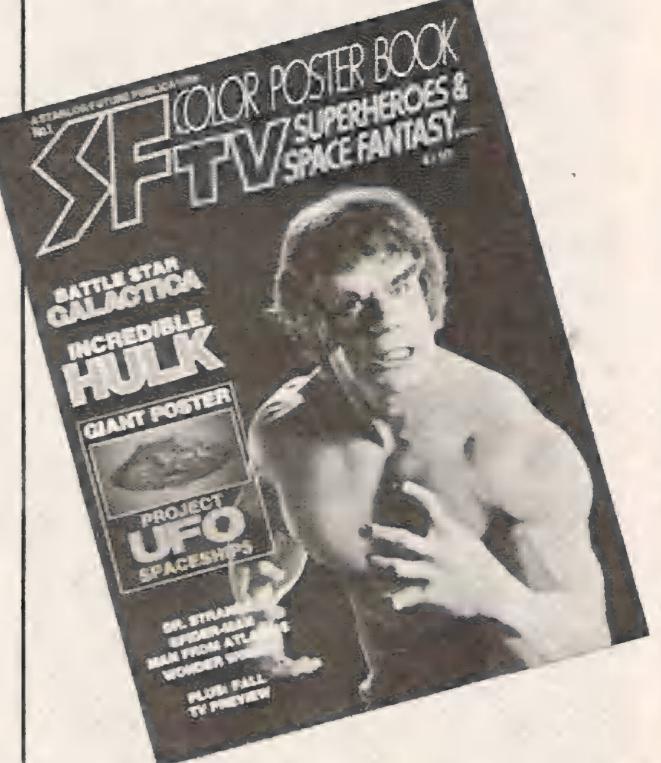
Although Supermarionation productions were phased out in 1969, it was not the end. Eight years later Gerry Anderson produced a commercial for an English company that manufactures Jif Dessert Topping. The advertising agency that commissioned the commercial was so pleased with the final results that they paid to have the commercial screened prior to every performance of *Star Wars* in the U.K.

So pleased is Gerry Anderson with the success of the commercial that he is giving some thought to returning to puppets. However, he claims with a smile, the budget for that commercial "resembled a transatlantic telephone number." If he does make the decision to return, it will take large sums of money and a good formula to make a profitable series.

"We've had a long run of Westerns followed by numerous police stories and for the time being puppet films are out of vogue. There doesn't seem to be a demand for them. Just recently, in terms of TV series, I saw a new Western coming out of Hollywood, so maybe we're going back to the TV Western syndrome—so in the same way some time in the future we may swing back towards puppets."

Next issue, the SFX series explores another little-known aspect of movie technique: miniature explosions by Joe Viskocil of Star Wars and Flesh Gordon.





PREMIERE EDITION in FULL-COLOR!

(Sure to be a collector's item!)

Featuring:

- * GIANT Color Fold-out Poster of Spaceships from TV's "PROJECT UFO"
- * BATTLE STAR "GALACTICA" Behind-the-scenes Photos and Advance Information
- * FALL TV PREVIEW of Superheroes & Space Fantasy Shows
- * "INCREDIBLE HULK" Color Pix & Story only \$2.25

(including postage & handling)

(Available on newsstands at \$1.50 or order direct from the publisher.)

Mail to: SF COLOR POSTER BOOK 475 Park Ave. South

8th Floor Suite New York, NY 10016

Please rush by First Class Mail:
_____ copies of the SF COLOR

POSTER BOOK, No. 1

Enclosed: \$_____ (\$1.50 each plus 75¢ First Class postage & handling each — total: \$2.25 per book)

NAME

ADDRESS

CITY

STATE

ZIP

NOTE: Send order on separate paper, if you don't want to cut out coupon.

STATE OF THE ART

(Continued from page 57)

Kenobi take Luke to some shattered old shrine, a mysterious mountaintop, or some such place, and there, he reaches up into the sky, grabs a handful of lightning and hands it to Luke-or the equivalent. We need to see Obi-Wan awakening Luke's own powers within him. It's not enough to see Luke practicing with the blast helmet on—we first need to see that he has the capability, that either he's been given it by Obi-Wan or that he already has it and Obi-Wan has helped to awaken it within him, before we can see him practicing to use the Force.

I leave the details of the scene up to George Lucas—but it's a scene that should have been in the picture, because its presence is implied by everything else. It is a needed scene.

If Lucas had stuck to his original conception of Obi-Wan as a crazy old hermit—a conception I admit to some fondness for myself—then this "missing scene" could have/should have been the transition point where Obi-Wan starts to regain his sense of identity and his prowess as a Jedi Knight. That is, the Force that Obi-Wan awakens in Luke also reawakens Obi-Wan's own capabilities that he will need for the battles to come. (This would also imply Obi-Wan's humanity, by the way, as opposed to the present implied mysticism.)

It's nice to think about, anyway.

6) One last implication to consider:

Han Solo's incorrectly-phrased remark that The Millennium Fulcon is "the ship that made the Kessel run in less than twelve parsecs!" always brings a groan from the audience.

Did you ever notice the expression on Alec Guinness' face immediately after?

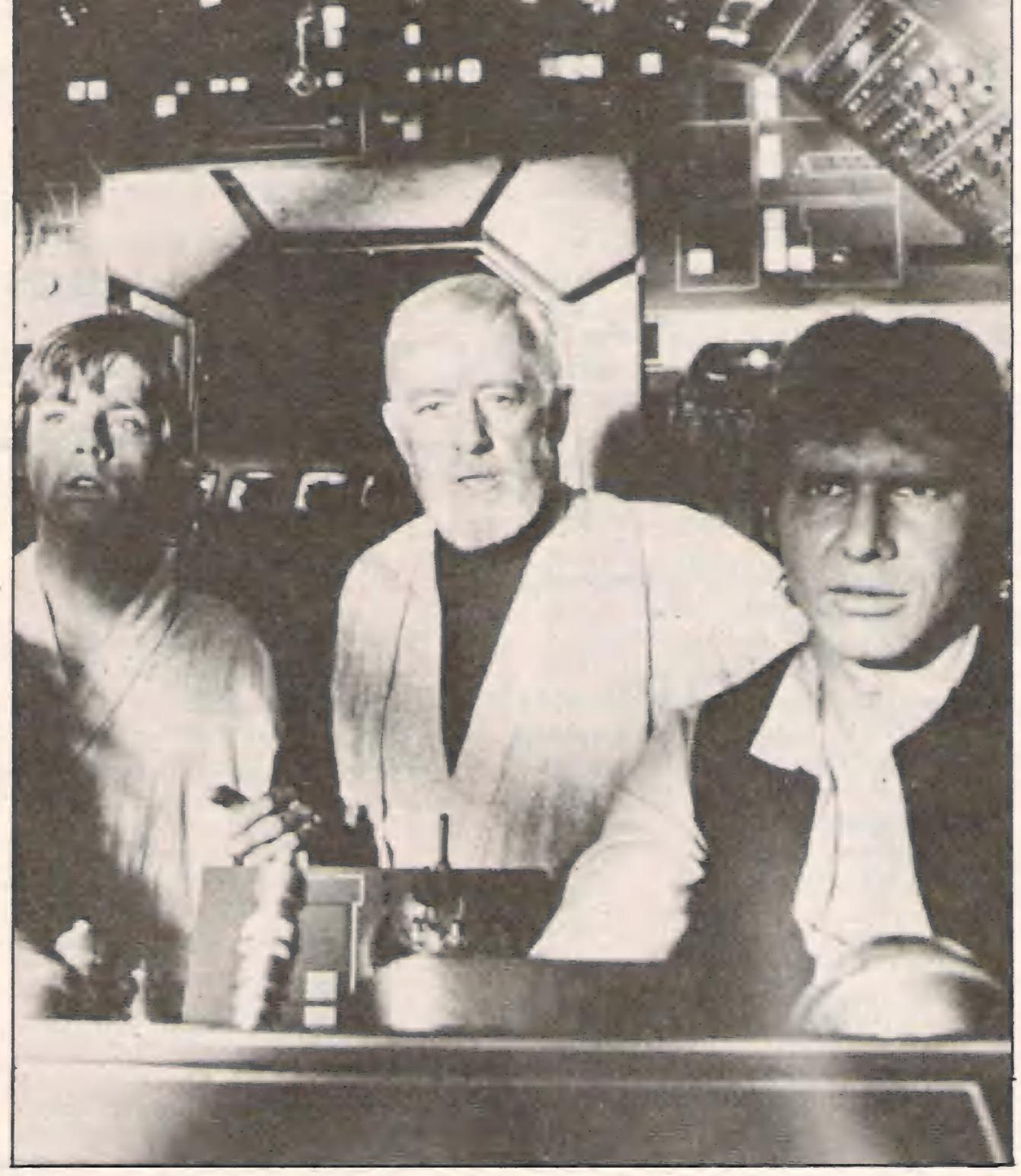
Obi-Wan Kenobi isn't fooled either. Is it possible that line is in there on purpose?

And if so, why?

You think about it—if you have any good theories, let us know, all right? *

Next Issue: **IMPLICATIONS IN CLOSE ENCOUNTERS**

Photo: Twentieth Century-Fox



FUTURE CONVENTIONS

Here is the latest information on the upcoming conventions. Star Trek cons are denoted with (ST), science-fiction cons with (SF). Other cons are labeled appropriately. As always, guests and features for most conventions are subject to last minute changes-for final details check with the person or organization listed. To speed communications, include a selfaddressed, stamped envelope. Conventioneers, Please Note: To insure that we receive all pertinent information regarding your con in time to list it in the calendar, STARLOG must receive the information no later than 15 weeks prior to the event.

ANDROMEDA CONVENTION (SF)

Arlington, TX Andromeda

July 27-30, 1978

3311 Friendswood Dr. Arlington, TX 76013

SPACE: 1999 CONVENTION '78

Columbus, Ohio

July 28-30, 1978

National Save: 1999 Alliance

P.O. Box 21085

Columbus, Ohio 43220

PARA-CON

State College, PA

July 28-30, 1978

August 4-6, 1978

Para-Con

c/o Fred Ramsey

622-C W. Beaver Ave.

State College, PA 16801

AUGUST PARTY FOUR (ST & SF)

Silver Springs, Md.

Maryland Star Trek Association

P.O. Box 924

College Park, MD 20740

ATLANTA COMICS AND FANTASY FAIR Atlanta, GA

Atlanta Comics & Fantasy Fair

August 11-13, 1978

7015 Knollwood Drive

Morrow, GA 30260

STAR TREK PHILADELPHIA (ST) August 18-20, 1978

Philadelphia, PA

Star Trek Philadelphia

Staten Island, NY 10306

88 New Dorp Plaza

STAR TREK AMERICA (ST)

September 2-4, 1978

New York, NY Star Trek New York

88 New Dorp Plaza

Staten Island, NY 10306

SHUTTLECON COLUMBUS (ST)

Columbus, Ohio Sept. 30-Oct. 1, 1978

Shuttlecraft Columbus

3740 Atkinson Rd.

Columbus, Ohio 43227

ROVACON 3 (SF & ST)

Roanoke, VA October 6 & 7, 1978

Ron Rogers

P.O. Box 774

Christianburg, VA 24073

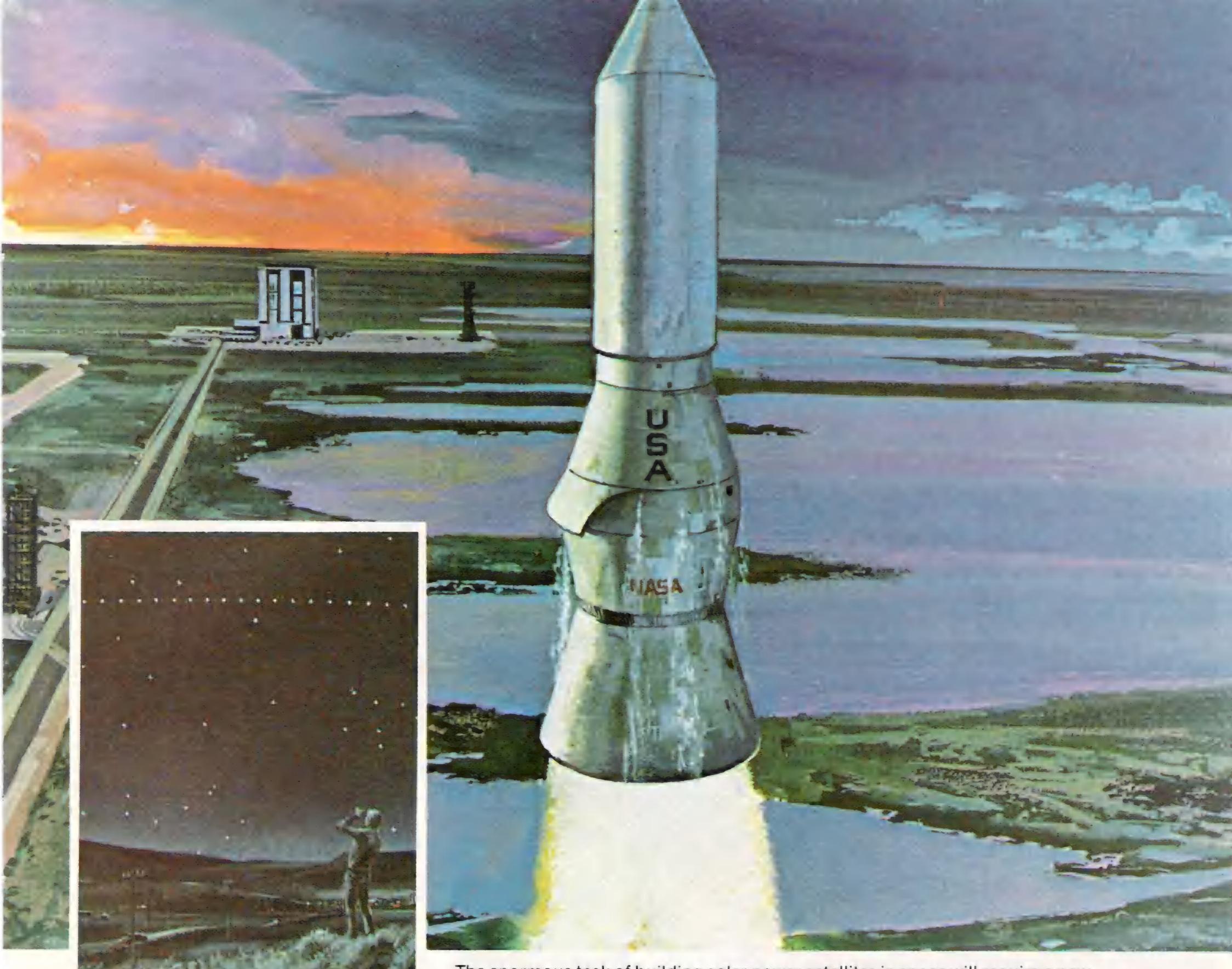
VEGACON '78 (SF)*

Las Vegas, NV 4689 Sandhill Road

October 27-29, 1978

Las Vegas, NV 89121

*Previously listed for June 16-18, 1978



The enormous task of building solar power satellites in space will require a new generation of heavy-lift rockets (above). A ring of powersats supplying energy to Earth will appear as a line of bright stars in the night sky (left).

SPACE SOLAR POVER

An Extraterrestrial Solution to the Energy Crisis

By ROBIN SNELSON

ur planet is running low on resources, approaching 'limits to growth,' courting energy crisis. Energy experts agree that new sources of power must be developed and they're searching the world over for a new solution. But here's a new angle: how about developing extraterrestrial resources—especially the limitless solar energy available in space.

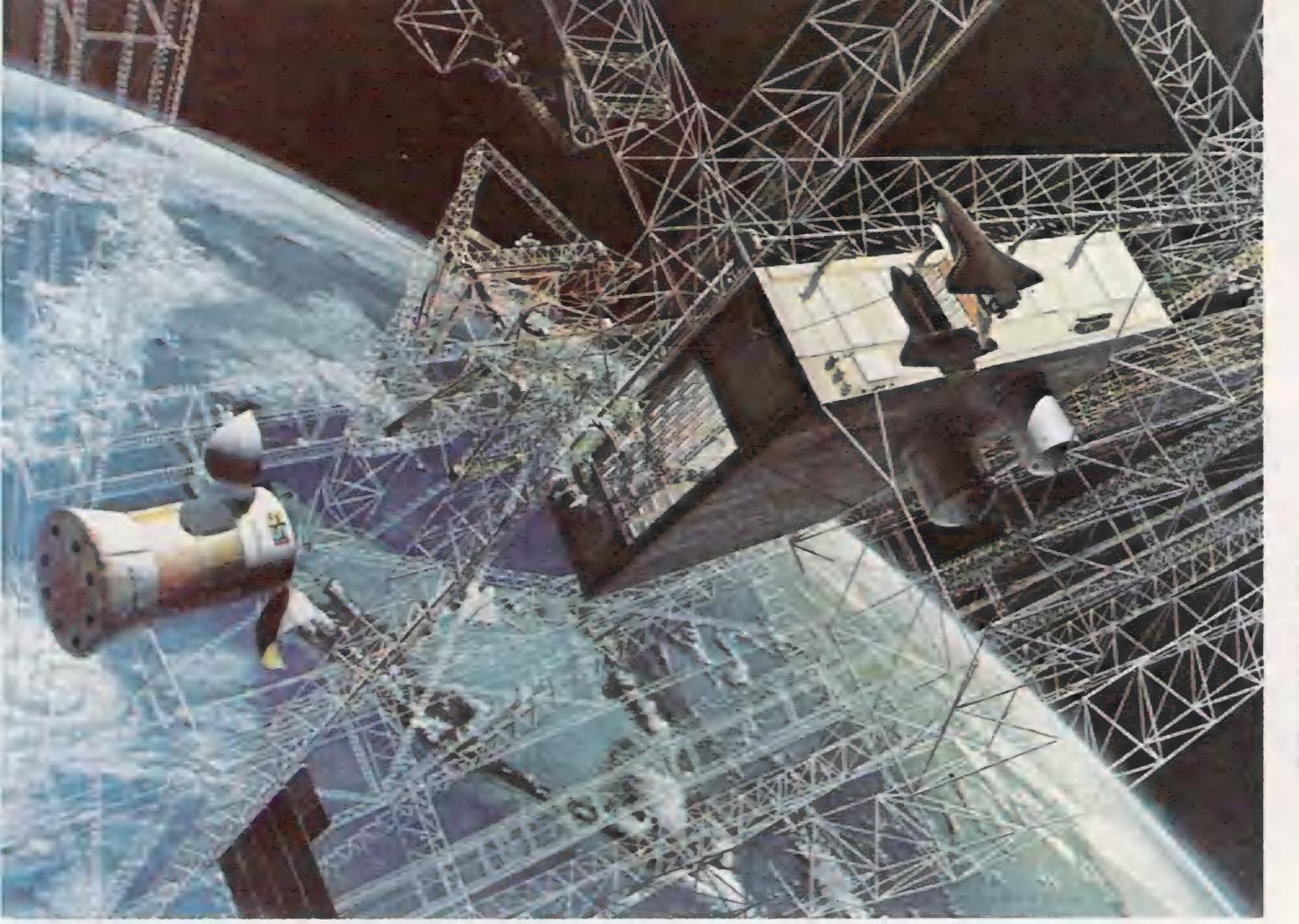
Solar power satellites take advantage of the continuous, concentrated, free sunshine in space to provide a large source of electricity for Earth. And space solar power is the only long-term, renewable energy resource for the future with adventure built in. Besides providing for a brighter planetary future, building solar power satellites will launch us into an unlimited future of living and working in space.

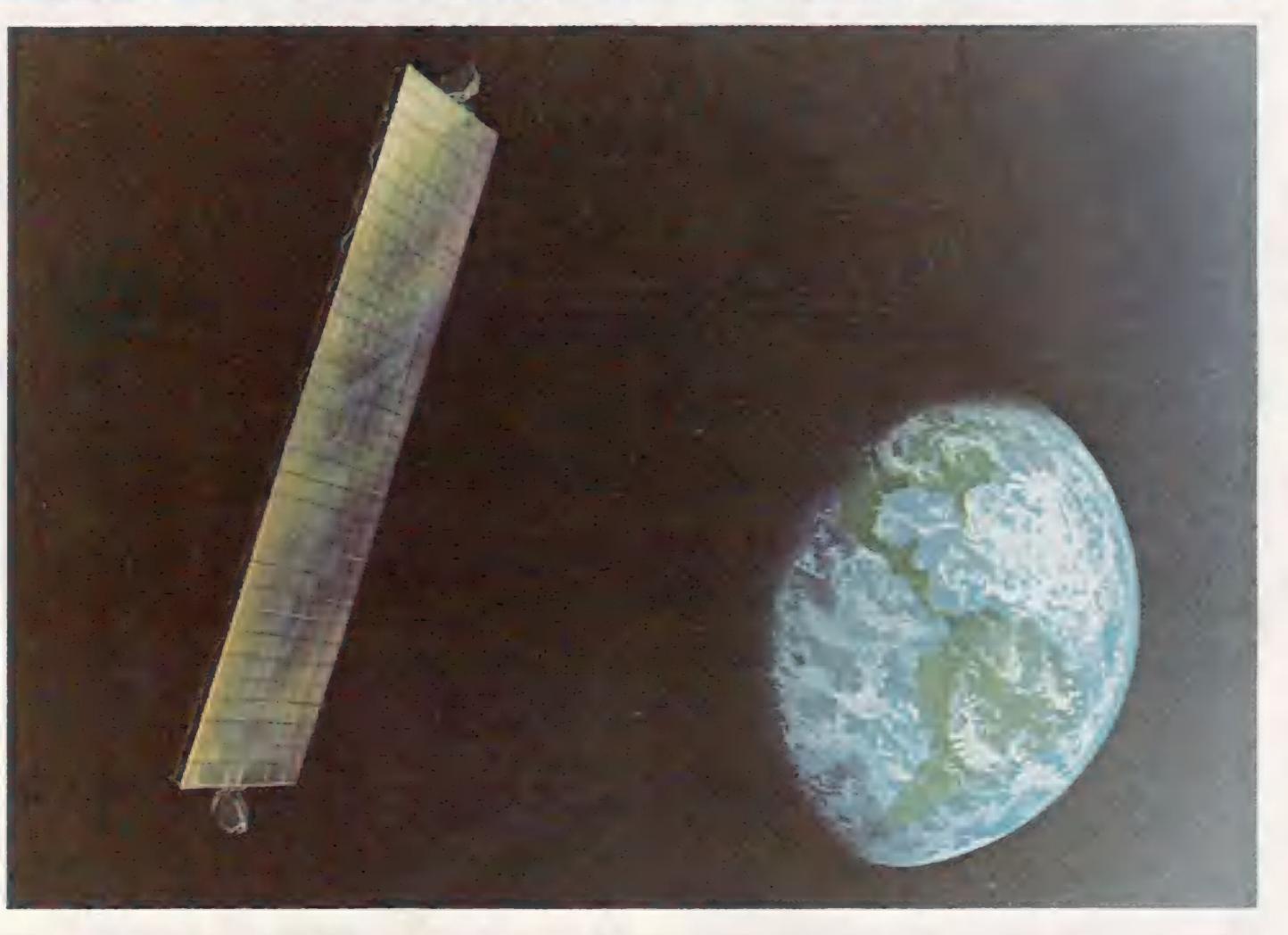
At the moment there are no solid plans to start building solar power satellites. That's because the whole ideas are forced to compete with old ideas (like nuclear power and coal use) for government research and development money. But as more and more people—in government and private industry, as well as the general public—become aware of the potential of space solar power, the idea moves closer to becoming a real element in our solution to the energy crisis.

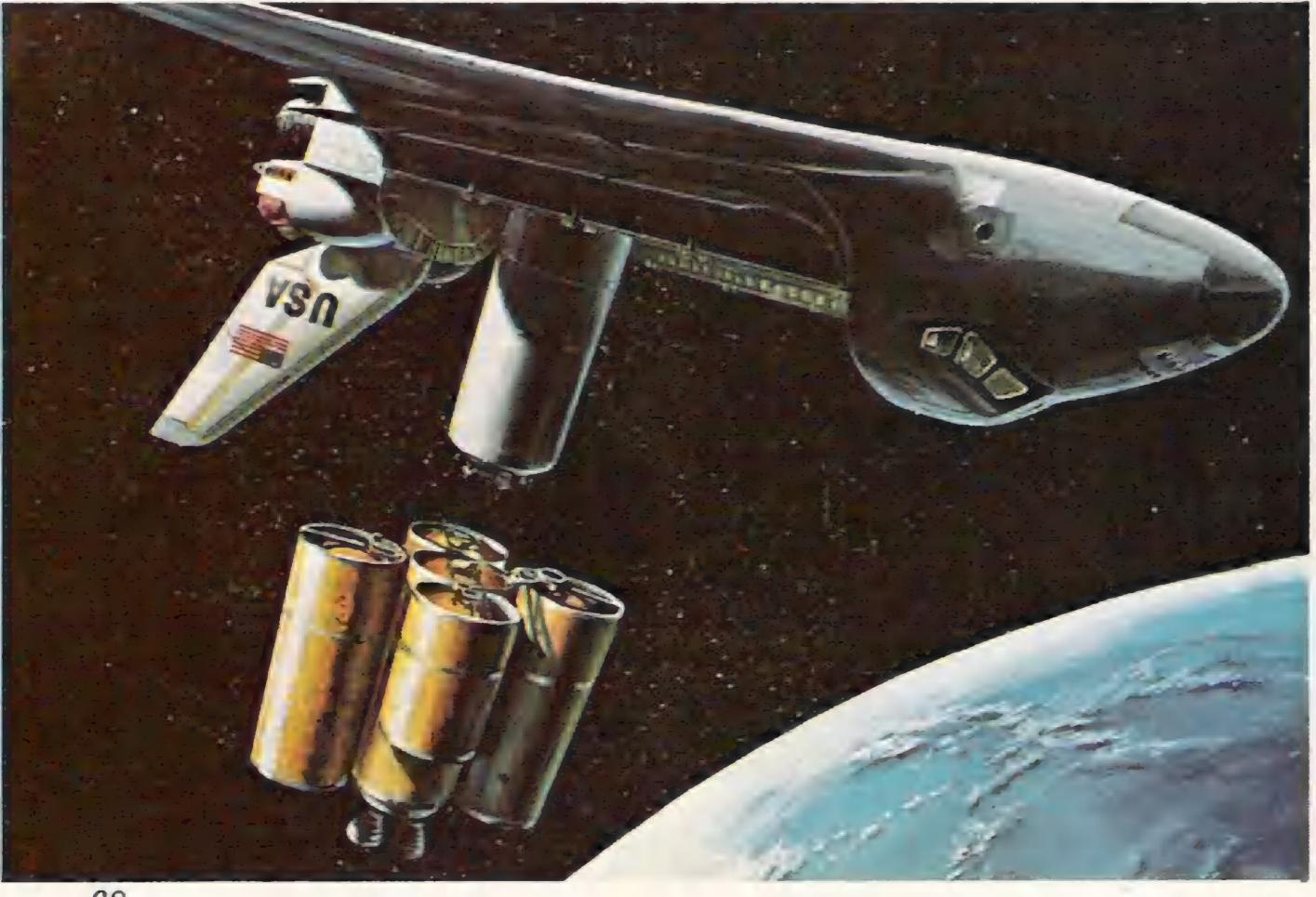
The concept was born only ten years ago in the mind of Dr. Peter Glaser. When he took his idea to NASA, he encountered a few raised eyebrows. Dr. Glaser's proposal sounded pretty ambitious, even to the people who were at that moment engineering the first landing on the moon.

Not only was Dr. Glaser's idea surprisingly novel (it hadn't even been predicted in science fiction), it was surprisingly big.

He envisioned a satellite ten miles long and three miles wide, covered with photovoltaic solar cells which transform sunlight into electricity.









Dr. Peter Glaser shows how powersats could supply electricity to any point on Earth. The inventor of the solar power satellite, Dr. Glaser is a vice president of Arthur D. Little, Inc., and acknowledged solar energy expert.

Positioned 22,000 miles high in geosynchronous orbit (always over the same spot on Earth), the satellite would receive sunlight almost continuously. The electricity produced would be converted to microwave, beamed down to large 'antenna farms' on Earth, where the microwaves would be reconverted into electricity, and then fed into existing power lines.

One solar power satellite could provide all the electricity for New York City or, put another way, produce twice as much power as the Grand Coulee Dam. Once in operation, the powersat would require only periodic maintenance. The fuel—sunlight—is free, and should be in good supply for at least six billion years.

Over the last decade, solar power satellites have been studied by NASA, the Department of Energy, private companies and universities. It's still an ambitious idea and plenty of research is still required. But there is general agreement on one thing: solar power satellites can be built. No scientific breakthroughs or technological miracles needed—just time, money and plenty of engineering.

The first one won't come cheap. Just working up to the first full-scale powersat will require an all-out effort on the scale of the Apollo program which landed men on the Moon. In this case, however, the payback on the investment is very clear. There will be no confusion about "throwing money away in space" when the end result will obviously solve some of our problems on Earth. The wisdom of tapping into a limitless source of energy is hard to deny. An open system that makes use of abundant extraterrestrial resources certainly holds more appeal than a finite "limits to growth" world.

The first powersat will likely be

Electrical utility in space: Two kinds of solar power satellite concepts are now being studied. The first (opposite page, top and middle) is the original, with billions of photovoltaic solar cells converting sunlight into electricity. The completed powersat would be more than 15 miles long. The second idea is the thermal engine powersat (this page, top and middle) which focuses the Sun's rays on a solar furnace to power an electrical generator. Boeing's thermal powersat design is more than 14 miles long. Opposite page, bottom: another new piece of space hardware which will be needed is the orbital transfer vehicle or "Space tug." The space shuttle is shown refueling a space tug, which would be used to move things from low Earth orbit into higher orbits than the shuttle can reach. Bottom, right: All that electricity produced in space would be received on Earth via rectifying antennas (rectennas), which would be roughly half the size of their space-based counterparts. The land under rectennas could be used for grazing.

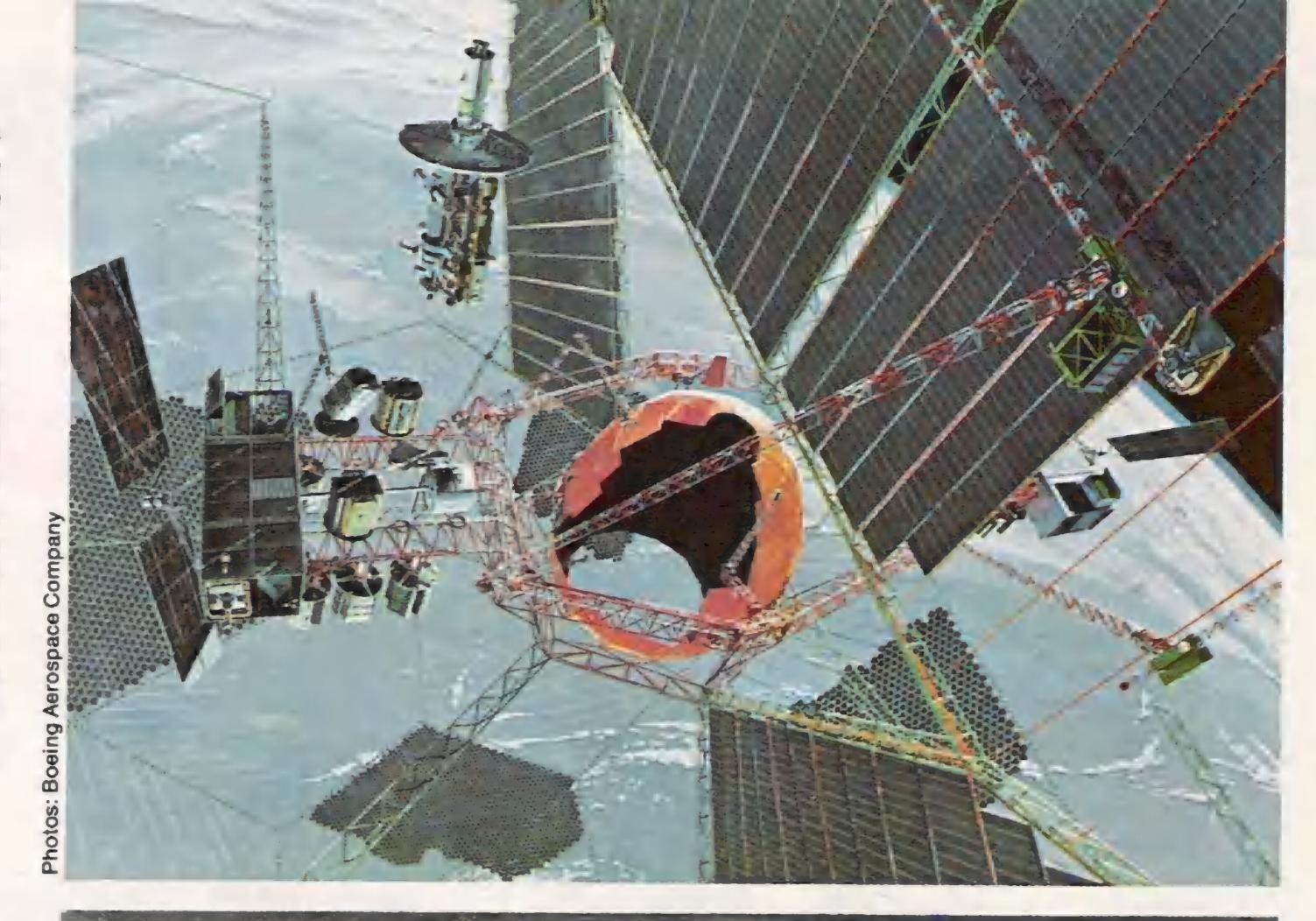
made from materials launched from Earth. But in the long run it will make better economic and environmental sense to mine the Moon and/or asteroids for building materials. (Bonus for hopeful future space dwellers:experience gained solving powersat engineering problems will apply to the eventual construction of large human habitats in space.)

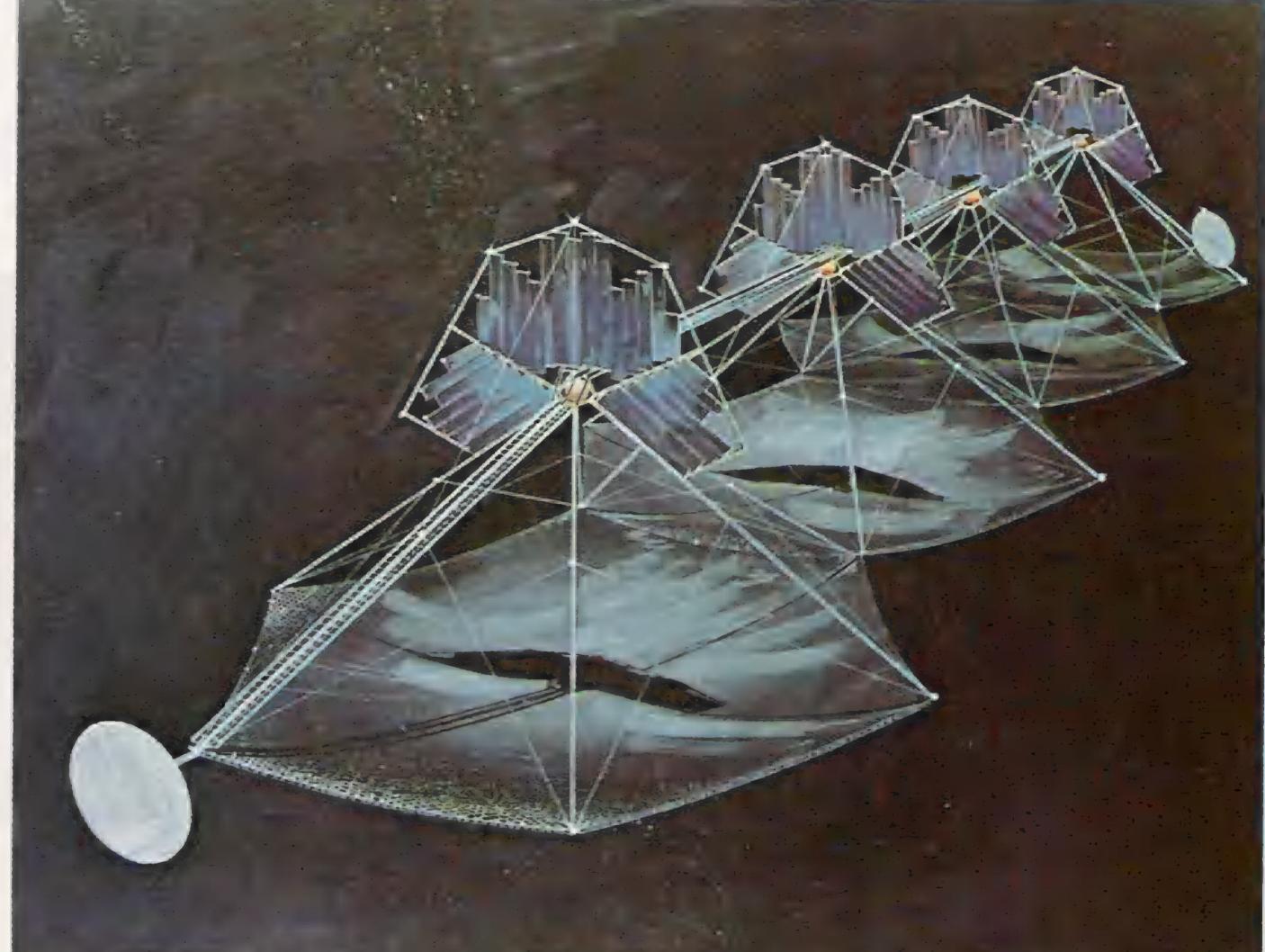
When will somebody get serious about building powersats? That depends on several factors.

For one thing, big, expensive projects like solar power satellites must depend on government-funded research to get things rolling. Some of the aerospace companies have already invested some of their own money researching the idea. But the truth is, no single company could possibly finance the entire project, any more than one company could have paid for a trip to the Moon (or, for that matter, picked up the tab for developing nuclear power).

Another sticking point with powersat critics: the environmental questions concerning microwave transmission through the atmosphere haven't been answered yet. Not enough is known—nor will it be, until NASA (or the Department of Energy) has enough money to carry out a research plan leading up to a prototype powersat. At the moment, the money isn't there.

Now of course, government is responsive to the wishes of its constituency, the people. How do we make sure that solar power satellites are given enough attention soon enough to assure they'll be producing power by the time we need it? Simple. Get the word out: who needs a 'limits to growth' world of shrinking resources when the most abundant natural resource ever discovered—space solar power—hasn't even been tapped?







INTERPLANETARY EXCURACIONA INC.

PORT OF CALL: THE INCREDIBLE SHRINKING PLANET Terran Travel Agent: JONATHAN EBERHART

hat has a surface like the Moon's, a density like the Earth's, a magnetic field that wasn't supposed to be there at all, and wrinkles?

It sounds like something out of a novel by Hal Clement (whose fictional planets, in fact, usually seem more rational), but it is quite real. If you still manage to think of the Solar System as just a collection of big rocks with a couple of gas blobs thrown in, then you've somehow managed to sleep through the Space Age. You certainly haven't been reading this column. Since IEI's guided tours started appearing in Starlog (this is the fourth), we've taken in a moon with a golden sky, a canyon that would span the United States, an object so mysterious that it is still classified only

as "object," and a variety of other wonders—all without leaving the vicinity of our home star.

This isn't just IEI-hype. It's a reminder—not only that things are seldom what they seem, but that there's excitement in store if you keep that old aphorism in mind. Mercury—our 'incredible shrinking planet'—is perfect proof.

It's a hard world to see from Earth, since as the closest planet to the Sun it never gets very far from the edge of the solar disk. (The result is that you can see it only at about dawn and dusk, and then only near the horizon where the atmosphere is at its thickest and haziest.) Only one spacecraft—Mariner 10—has ever been there, at least from Earth, although it did follow

a carefully calculated sun-circling orbit that let it fly past the planet three times at six-month intervals.

Looking at Mariner 10's photos of Mercury, taken from as close as 323 km. to the surface, some observers sort of said, "Oh well, it looks like the Moon," and went back to bed. Yet Mercury is a strange world indeed. Mariner data have kicked at least one major planetary theory in the head, and even the photos have shown one kind of feature—possibly unique to Mercury in the solar system—suggesting that any resemblance to Earth's Moon is, literally, only skin deep.

The place certainly has an outwardly moony look, as was expected. Earth-based photos of Mercury are basically crummy, but other measurements had shown that any atmosphere would be trivial at best, thus letting in meteorites large and small to spatter the surface



with craters. (An odd note: In 1901, decades before such a conclusion could be confidently drawn, an astronomer named Thomas Jefferson Jackson See made a sketch of what he had just seen while looking at Mercury through a 26-inch telescope at the U.S. Naval Observatory. The curved lines he drew look enough like craters that Andrew Young of Texas A&M today believes that See may in fact have been the first to discover the nature of the Mercurian surface.) Mariner 10's close-ups, however, revealed something else as well: a number of great cliffs, or scarps, as much as 3 km. high and some of them long enough to reach from Chicago to Minneapolis.

What can they be? There's nothing like them—certainly not of such size on the Moon or Mars. Their rounded crests and gently scalloped flanks make them look something like the long-since hardened leading edges of ancient lava flows, yet in places the scarps pass right through large craters, leaving intact the crater's rim, the scarp and the adjacent surface. A tide of flowing lava would either have inundated the crater or, if the crater was formed after the flow hardened, have flattened the flow's edge. Nor do the scarps look like something associated with a crack—a pulling apart—in the surface. Even if you get really exotic and suggest that the scarps were left when material eroded away from beside them, what would do the eroding? Wind? This isn't Earth or Mars, you know. Water? Face it. Mercury's just too close to the sun.

But (aha!) there's a clue. In a few of

those craters crossed by the scarps, the crater walls seem to have been moved -horizontally shifted-at the junction with the scarp. It's as though the parts of the rim on opposite sides of the scarp had been pushed together. The scarps, if they were in fact formed by such squeezing, are what amount to wrinkles on the surface of Mercury.

As for the cause of the wrinkles, consider a dried fruit. As the moisture evaporates, the interior shrinks, leaving too much skin to make a smooth covering. In the case of Mercury, one possibility is that as the planet's interior cooled, it shrank, causing the crust to bunch up. Or perhaps the core simply settled into a more compact crystalline form. Larry Niven, who gives planetary features names like Mt. Lookitthat, would probably call it Pruneworld.

Prune or planet, its wrinkles are spectacular, particularly if you're making wide-screen cinetapes from an IEI skimmer over one of the crater crossings. Discovery Scarp, for example, is some 550 km. long, passing through a variety of craters as much as 55 km. in diameter—just the thing for an awesome few hours of low-altitude "wrinkle-riding." One of the most conspicuously deformed craters is crossed by Vostok Scarp, named not for the spacecraft but for a ship used in an 1820 Russian Antarctic expedition.

Other unusual surface markings on Mercury include what Jay Melosh and Daniel Dzurisin of the California Institute of Technology believe to be two near-global patterns of fault lines, extending 60° to 70° north and south of

the equator. Such patterns, they suggested in 1976, could be due to stresses created early in the planet's history, when the slowing-down of its thenrapid spin rate caused the equatorial bulge to shrink as Mercury became more spherical.

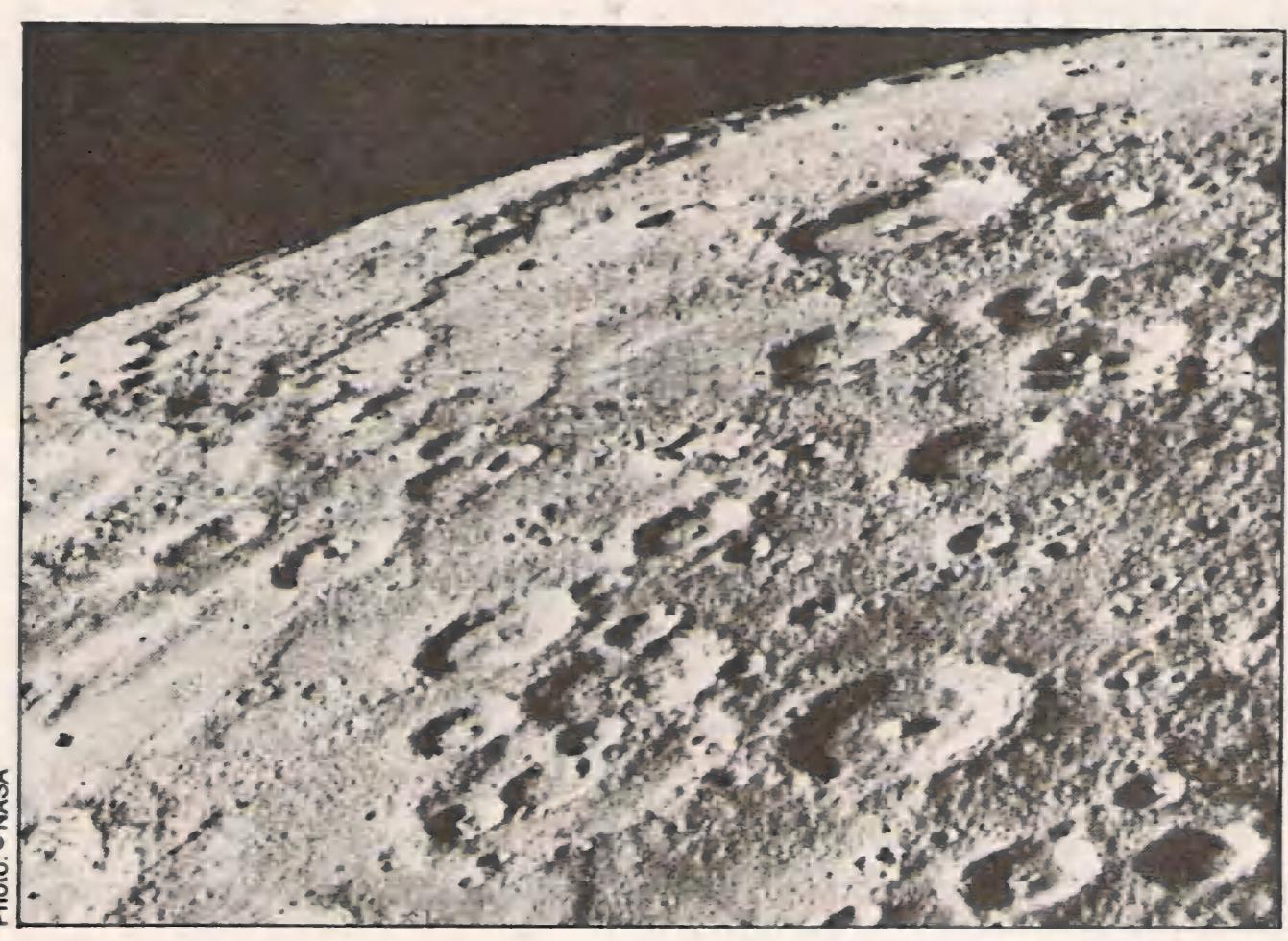
It is Mercury's slow rotation, in fact, that made a major surprise out of one of Mariner 10's findings: the presence of a magnetic field. The field is weak less than I percent of Earth's—but apparently greater than those of Mars or Venus. The Mariner 10 scientists were caught completely flatfooted by the discovery, since all their theory said that such a field could only be produced in a rapidly rotating planet. The concept is even called "dynamo theory," which evokes images of spinning turbines, electric motors and the like. One implication may be that Mercury's huge iron core (possibly larger than Earth's whole Moon) is still all or partially molten. In case that makes you wonder about the scarps again, supposedly due to shrinkage from internal cooling, Sean Solomon of the Massachusetts Institute of Technology has calculated that sufficient shrinkage could be produced by cooling of the planet's mantle alone. If the core were also cool, Solomon says, the resulting shrinkage might have produced even more surface wrinkles than Mariner 10 actually saw.

No two of the solar system's worlds are alike. But even if that seems like a cliche, it's worth noting that everytime one takes another look, the differences get greater. The more we learn, the less we know. What a nice arrangement. *

"Interplanetary Excursions" is a continuing STARLOG feature; its purpose is to explore the further reaches of the cosmos through scientific extrapolation. Jonathan Eberhart is Space Sciences editor for Science News Magazine.

Far left: Discovery Scarp some 550 km. long is one of the major features of I.E.I.'s tour of Mercury. The view is from a surveying craft, as envisioned by artist Ron Miller.

Victoria Scarp is shown in this view of Mercury's northern limb. The linear dimension along the bottom of the photo is about 580 kilometers.



THE NEW FANTASY SHOP, 3905 W. Lawrence Ave., Chicago, IL 60625. The First Chicago STAR TREK Center!!! Posters, Books, Stills, Uniforms, Models, Blueprints and More!!!

STAR TREK CONVENTIONS. We put on ST mini-cons in the VA/DC/MD/PA/NJ area. Send self-addressed stamped envelope for info on one near you. Mini-Con Associates, PO Box 11452, Baltimore, MD 21239

SPACESHIP ART WORK FOR SALE unframed: STAR WARS, TREK. 1999, FRBDN. PLANET, V.BTM SEA. Color samples, prices on request. RM 304, 801-79th St., Darien, IL 60559



BROOKLYN NEW YORK 11209

(N.Y. RESIDENTS ADD 8% SALES TAX)

FOR FAST DELIVERY SEND CERTIFIED CHECK

OR MONEY ORDER

UFO INFORMATION-MAJOR SOURCES Computer generated list \$1, INTREPID, P.O. Box 848, Issaquah. WA 98027

ELECTRONIC SOUND EFFECTS—For your scifi/fantasy film epics! The sounds of BLASTING LASERS, ATOMIC ENGINES, HOVERING UFO'S AND MORE! On standard audio cassette, w/ or w/o Dolby encoding, for only \$9.00 ppd! KEN-NETH WALKER/GALACTIC LIGHT, 5421 Silbert Road, Norfolk, VA 23509

ORIGINAL MOVIE LOBBY POSTERS '70-'78 Send \$1 for new catalog to THE MOVIES, 84 Roslyn Dr., New Britain, CT 06052

FLIGHT PATH, a stunning new fanzine devoted to UFO/CE3K. Send \$2.50 to: WILLIAM ADKINS JR, 1774 Marks Road, Valley City, Ohio 44280

TACHYON-NEW STAR WARS FANZINE! Club formed too. Send 50¢ + Stamp: S. Guardi, 5244 S. Sayre, Chicago, IL 60638 NOW!

SELLING COMIC BOOKS, Disney, Hero & Sci-Fi Pulps, Sci-Fi & Horror Mags., James Bond, Diana Rigg, "Star Trek", Doc Savage, Art, Movie Pressbooks, Posters, Lobby Cards, Photos, Books, Etc. 1900-1978, Two Giant Catalogs 75c. ROGOFSKY, Box SL1102, Flushing, NY 11354

STAR WARS GUM CARD SETS. 66 cards, 11 stickers, \$7.50. Very rare foreign sets printed in French and English, \$15. Wonder Bread sets \$3. SW patches, life-size figures, original SF movie posters. Tally Ho Studios, 639 Park S.W., Canton, OH 44706. 216-452-4488

STARLOG FANS: Now you can collect the spectacular b/w & color stills seen in these pages at affordable prices. Over 4000 scenes from 300 movies & TV shows are described in a giant 100-pg catalog designed for fun reading. Get the best quality anywhere. Send \$1.50 to:

STILL THINGS 13343 Bombay St. Sylmar, CA 91342

BELT BUCKLES—Star Trek lives, Star Trek (Kirk & Spock) \$5.50 ea., others. Catalog \$1. Horizons Unlimited, 700B Arcadia cl., Huntsville, AL 35801

SHUTTLE CRAFT BLUEPRINTS: Detailed, exact. Shows close-ups helm, navigation console. plans show how to run the ship! Send \$3.00 to Douglas Day, 3151 Oakdell Lane, Studio City, CA 91604

FREE! The Federation Trading Post Catalog of the 23rd Century The largest variety of STARTREK & STAR WARS merchandise in the galaxy! Send 25c for 1st class post & hdlg. to: Federation Trading Postrm - Dept. S 2553 Telegraph Ave., Berkeley, CA 94704

KISS AND ELVIS FANS-Rare find! Giant full color poster books on KISS or ELVIS. Out of print and much desired, both feature rare photos never seen before! Each opens to colossal 2x3 poster. Each costs \$2.50 or get both for \$4.50. Limited! S.F. PROD. 218A North Henry St. Brklyn, NY 11222

ANIMATION MODELS—Rare, unusual. Kong to Star Wars. SASE, Tom Baker, 3618 Driftwood Dr., Charlotte, N.C. 28205

STAR WARS 400'c-s Imperial cruiser attack on Rebel ship. Lots of Darth Vader. Night of the Living Dead in S8. L.A. Films, Box 1054, Cudahy, CA 90201

LOW PRICED GUM CARD SETS: Pete Conlin, P.O.B. 832, Westfield, NJ 07090. CE3K-\$5. Star Wars 3rd series—\$5 including postage. Please send order before 8/10.

STAR WARS, STAR TREK, CLOSE EN-COUNTERS, FANTASTIC CATALOG! HARD TO FIND ITEMS, TOP QUALITY. FIND OUT WHY WE'RE THE BEST! SEND \$1 PLUS DOUBLE STAMPED RETURN ENVELOPE TO: NEW EYE LOG, P.O. BOX 10193, ELMWOOD, CT 06110

SET OF EIGHT SPACE ART POSTERS. \$12.75 plus \$1.00 for postage and handling. Wilbur Hunt, 2103-5th Street, Pal Metto, FL 33561

COMPLETE STAR WARS MERCHANDISE LIST: What, Where, How Much-Only \$1.00 from TKRP-599, Ridge Row, Hanover, MI 49241



STAR-GATE is a multi-player SCIENCE FICTION strategic space game. Launch your ships into the great interstellar void, capture and control your own 'empire. What will the fortunes of space bring you? Rich planets laiden with vast wealth? or slaves to build your fleets and further your conquests. Or will you run into space pirates? Perhaps you would rather be a pirate commanding vast fleets of blackhearted space rogues, moving thru the galaxy capturing fleets, plundering planets to fill your coffers with their wealth, building your own thieves empire. maybe space merchant is more to your liking controlling large merchant fleets that move freely from empire to empire trading with each one to build your wealth. In STAR-GATE each player assumes the role that suits him, then sets off into the unknown galaxy to build his empire. STAR-GATE is a hidden mov ement play by mail game. Each player has two weeks to decide what his moves will be and mail them to us, we process them thru our computer and mail back a printout describing the current status of his empire. Entry fee for the game is \$10(that's \$5 for the gamebook and \$5 for the first 5 turns) or send \$1.50 for rules only to:

> COMSIM GAMES BOX 6 BIG TIMBER RD. ELGINILL. 60120

\$11.00 per line (limit: 35 characters per line) MINIMUM-THREE LINES BASIC RATE: Punctuation symbols and spaces count as characters. Small Display ads: \$90.00 per column inch (Camera-ready ONLY!) First line only-Word(s) of your choice (underline HEADLINE: them) will be printed in BOLD CAPS. PAYMENT: Cash, check or money order must accompany ad order. (checks payable to STARLOG Magazine) For STARLOG No. 17—in our office by May 24th. **DEADLINE:** For STARLOG No. 18—in our office by August 20th. STARLOG Magazine, Classified MAIL TO: 475 Park Avenue South 8th Floor Suite New York, N.Y. 10016

use separate paper if you prefer)				
please print or type)				
	Enclosed: \$	for	lines, running	times.
	Name			
	Address			
	City		State	Zip

THE MARLEX SOCIETY needs your "Creative Time", to develop this "Non-Profit Corporation" for "Dramatic Arts and Sciences." If you are Frustrated with not having free access to enlightenment of your choosing, make your own solution, by writing: Marlex, Box 1932, W.P., FL 32790

PHOTO ARTICLES on SPACE: 1999, OUTER LIMITS, KRONOS, VENUSIAN films & more in PHOTO FRIENDS *2! \$2.25: Tim Paxton, 257 Morgan, Oberlin, OH 44074. Issue *1-\$1.75 Selling fast!

AIR DARTS. More fun than dangerous darts & absolutely safe. Space age balls cling to bright target, can't damage furniture or walls! Only \$2.95, 2/\$5.50, plus 50¢ per game for shipping. Send to: Harry Summer, P.O. Box 411, New York, NY 10014

BE DRAWN INTO YOUR OWN S.F. FANTASY! For info, send S.A.S.E. to: Galactic Art, 274 Dorothy Dr., High Point, N.C. 27260

BOOK & MAGAZINE READERS! Send your wants to: S&S Books, 80 No. Wilder, STG-9, St. Paul, MN 55104



FLASHING LITE PENDANTS FOR UNDER \$5. Make them for fun & profit! Plans, parts list & sources only \$1 from "Plans", Starhaven Publishing, P.O. Box 343709, Coral Gables, FL 33134

BLUEPRINT POSTER OF THE SK-1 Class Battle-cruiser. Send \$5 M.O. to: D. Weir, P.O. Box 2644, Paducah, KY 42001

ATTENTION: Gene Roddenberry, George Lucas, John Dykstra & Jack Webb. I design & build spaceship miniatures. Your comments welcome! Plus anyone else that's interested, contact: D. Weir Enterprises, p.o. box 2644, Paducah, KY 42001

20" x 30"SCI FI PHOTOS. Also stills, posters made from your photos & SF search service. Send SASE for list. Imperial Trading Post, Post 1968 Halekoa Dr., Honolulu, HI 96821

SF FANS: ONLY 50¢ FOR PEN PAL. Write interests, age, will match you with perfect pen pal. Send 50¢ to: PPS, Rt. 3, Bx.132E, Montrose, CO 81401. 1st 90 get FREE gift.

STAR WARS & OTHERS - Posters & MORE!! Send SASE, 10¢ for list to STARPOST Ent. R1, Box 265, DeSoto, IL 62924

ADULT STOP-MOTION FANS WITH MONEY: RARE SLIDES AND LITERATURE. SEND SASE + \$1 To: POB 244, MIDWOOD STAT., Brooklyn, NY 11230

DEVOTION, the FAN-INVOLVEMENT ZINE-CLUB, just \$1.50. Also SW-CE3K-CARDS at \$5/set. Send 25¢ to Box 1172, Wilmington, DE 19899



BEACON · DOME LIGHTS · LIGHTS · HOMING
FOR FULL INFO WRITE:

PAUL M. NEWITT / StarFleet Division 5035 SWINGLE DR., DAVIS, CALIF. 95616

DIXON SPACESCAPES—Over 100 color slides available (SEE STARLOG No. 5 for examples) of imaginative astronomical paintings. Send for FREE Catalog. Dixon Spacescapes, P.O. Box 723, Rialto, CA 92376

SAVE STARLOG

in "mint" condition!!

Your choice of two deluxe styles,

both covered in rich midnight blue with silver stamping.

only \$4.95 each



Open at one end, this traditional protective box is designed to stand vertically on desk or shelf with quick, easy access to one full year (8 issues) of STARLOG. Logo stamped on spine of case

ORDER TODAY!!

POSTER—Imported from England. Better than U.S. version. Giant size. Full color. Rush order as supply is limited. \$15.00 ea. World of Star Wars, 20 W 10 St. NYC 10011

STAR TREK SLIDES—Best quality Star Trek slides anywhere! Large full 35mm format. Perfect color! \$1.00 gets you 2 samples and complete list. Star Fleet Productions, 82 Pierrepont, Brooklyn NY 11201

ESOTERIC ENTERPRISES

Box 35 Bovard, PA 15619 PAINTING OF YOUR FAVORITE PLANET, custom made. 22x28." Send name of planet and \$2.50. ZODIAC SIGN, hand-painted, 14x11. Specify. \$2. RELIGION IN SF FILMS. Little book is xInt guide to sfantasy film viewing based on moral/religious content. Includes MORAL RATING on EVERY sf/horror film made since 1896. \$5. T-SHIRTS 2001, CE3K, CLOSE EN-COUNTERS, FORBIDDEN PLANET. All sizes. \$6.50 ea. SF I.Q. TEST, \$2. SF/HORROR FILM ALMANAC. Thousands of facts and reviews from LADY VANISHES (1896) to MEDUSA TOUCH. \$3.50. 200 MOST FAMOUS SF FILM QUOTES. \$1. SF FILM CATALOGUE 16mm rentals, lowest costs. \$3.

"BRING BACK STAR TREK!" QUALITY 21/4-inch button, \$1.00, postpaid. Catalog free. T-K Graphics, P.O. Box 1951, Baltimore, MD 21203

CLOSE ENCOUNTERS TRADING CARDS: From WONDER® BREAD. \$6.50 per set postpaid. Kovacs Comic Book Store, 2169 Lee Road, Cleveland, OH 44118

STAR WARS TRADING CARDS: WONDER® BREAD. \$2.50 per set postpaid, \$1.00 per set for 20 or more sets. Kovacs Comic Book Store, 2169 Lee Road, Cleveland, OH 44118

LOGANS RUN THE DEEP just released in Super 8 400 Color/Sound. Hundreds of new classics at huge discounts. Free Catalog. AMH Film Dist., Box 164 Willows, CA 95988



holding eight issues of STARLOG (plus photos, etc.) in a box that can stand vertically or horizontally or can be carried around. Stamped on spine and front lid.

Mail order to and make check payable to Jesse Jones Box Co
STARLOG Protectors
P O Box 5120
Philadelphia, PA 19141

(Please allow 4 to 5 weeks for delivery.)

Outside USA — add \$ 1.00 postage,
and send all money in US funds.

1. THE LIBRARY SLIPCASE
2. THE PORTFOLIO BOX

(Write quantity in front of style(s) you prefer.)

NAME		
ADDRESS		
CITY		
STATE	ZIP	
(Don't want to	cut up this page?	

Write order on another piece of paper.)

X-WING BLUEPRINT—Front, top & side views of X-wing in exact scale detail. Hours of study. Fantastic! Send \$3.00 to World of Star Wars 20 W 10 St. N.Y.C. 10011 ALSO—Klingon Cruiser blueprint poster \$3.00 AND T.I.E. Fighter blueprint \$5.00.

ए।इए	ine:: ACHII	MG3	
TE		FOR	
OF	THE		
	TIC READING EX		2
LIMITED C	COLLECTOR'S EDI	TION	
	LABLE ANYWHER		20 m
	ILLUSTRATED AND STIMULATING!	\$995	
	all a consistent and a second		Eccal !
HODIZON	NI Send S9.95 Check	or Money Order to:	- in the state of
HURIZUN I	oublications, PO Bo	x 108, Riverton, N.	J 08077
	y copy of THE TEA		FORCE
	1 0001 0. 1112 124	Commus or The	UNUE
Name	-		
Street			

HAND PHASER TYPE ONE: These handcrafted, exact scale replicas of the Star Trek hand phaser come fully assembled, painted, and weighted. Each is a solid, one-piece model containing no moving parts. \$17.95 each. Send to: STAR FLEET PRODUCTIONS INC., 82 Pierrepont St., Brooklyn, NY 11201

FASCINATING: All sorts of weird alien robot voices saying anything you wish. For info send \$4 for cassette or reel demo tape to JMP Studios, 11745 E. Washington Blvd., Whittier, CA 90606

PHOTOS—SF/HORROR TV SHOWS, MOVIES, TREK, 1999, many more. Catalog \$.25. SF Fotos, 3 Woodland, Keansburg, NJ 07734

ALAN DEAN FOSTER

(continued from page 24)

occasional break to write a short story.

"This schedule has produced the "Commonwealth" novels, Bloodhype, Icerigger, and Midworld, including his delightful trilogy about Pip—The Tar-Aiym Krang, Orphan Star, and The End of the Matter. He's proudest these days of a short story collection published in December 1977 by Ballantine/Del Ray titled With Friends Like These . . . All of his books are in print from Del Ray—an enviable record for any writer, especially a "lazy" one—and End of the Matter made the B. Dalton paperback bestseller list in the fall of 1977.

Foster's remaining time gets taken up with reading and shopping and travel, a passion he shares with many SF writers, Robert A. Heinlein, Frederik Pohl and L. Sprague de Camp among them. "That's one of the reasons I work so hard," he says, "so that we can travel. JoAnn and I have been to Asia and are going to South America. I'd like to visit all four continents before I'm forty skim them all—then go back to where I'd like to spend some time." Asked how this passion for travel—so prevalent among science fiction writers—relates to science fiction, Foster grins. "Well, we are all travel writers, in a sense. We just write travelogues of places we can't travel to—yet."

Unlike most writers, Foster admits that "everything in life does not revolve around writing." He and his wife recently spent a month travelling with friends from Australia around the state of California. "It's lost writing time," he says, "but not lost living time. A lot of people would consider that unprofessional, but . . ." He shrugs.

He also tries to find time to pursue interests in art and in rock music. He'd like to see more science fiction dealing with the latter (like his own story "Wolfstroker" in the collection With Friends Like These . . .) and is fancinated by the "growing incestuous relationship between rock and science fiction." The British group Queen, for example, "used Kelly Freas' first painting for Astounding on the cover of their News of the World album, and they even had him go back and re-paint it for them."

As for the future of science fiction, "it's very healthy. Science fiction is hot right now, and Close Encounters and Star Wars are partially responsible, but not completely. Paperback publishing became dominant over hardcovers in the last ten years, and that's what did it. Booksellers—not SF booksellers, either— will tell you that SF on their shelves will eventually sell, unlike westerns or mysteries.

"The general public is simply more aware, and buying a lot more science fiction. They'll go out and buy Raise the

Titanic or The Betsy, but maybe they'll pick up a Star Trek book or an Asimov book now, too."

Science fiction on film and TV? "I don't believe that most of the people in America are watching Laverne and Shirley. Maybe that's naive of me, but I do think the level of intelligence among the general public is higher. What we'll probably see is a lot of quick imitation crap made to capitalize on Star Wars... maybe we'll see something good, two years from now. Good work takes time." Foster's idea of a good movie project would be a film of Olaf Stapledon's "superman" novel, Odd John.

As for Alan Dean Foster himself, he's hard at work on a sequel to *Icerigger* titled *Union of Ice*. Beyond that, he's not sure. He has ideas for two fantasy novels.

Why does he write science fiction? "Doesn't everyone like to build universes in his own mind? Play God? In the words of Carl Barks, 'move worlds around like cookie crumbs'?"

Maybe not everybody, but Alan Dean Foster does.

BODY SNATCHERS

(Continued from page 27)

It is a remake, the title is perhaps a bit dated, and, uh, undignified, and it is a science-fiction film which does not rely on wondrous spacecraft and special effects. "Our feeling," explains Kaufman, "is that basically the original was not that widely seen. It became a classic within certain cults, but it's not that well-known by the general public. But the title is very familiar to people. We think that titles are strange things. I don't know what Close Encounters Of The Third Kind does. I remember that George Lucas showed me some marketing research that they had done on Star Wars; people said they wouldn't go see a movie with a princess in it, things like

that. George was quite upset about it. Science-fiction people weren't that interested in it; he was startled. Yet George and I thought that science fiction was ready to explode, while market research showed these things."

Body Snatchers' main selling point is the frightening and powerful story itself, which Solo and Kaufman feel is particularly relevant today. "I hope this film will frighten," is perhaps the director's most cryptic and telling remark.

The budget for The Invasion is around three million dollars (the original ran up a tab of around \$400,000), and the principal photography was completed in forty-nine days. San Francisco locations were implemented by necessary studio work to achieve the desired level of realism. As Kaufman puts it, "I love fantasy, but it has to be anchored somewhere. Reality is something that's very important to me. Lucas was very careful that way when he did Star Wars. He kept talking about a used, lived-in future; he had to authenticate the whole thing. That's the test of great art."

Philip Kaufman has found his maiden voyage into science-fiction film to be an exhilirating experience, but confesses that he has always looked to the genre for inspiration. "Science fiction is wonderful," he says. "Finally, since the Western seems to have run its course, science fiction is truly 'the new frontier.' This is the chance to explore so many different things that bring a sense of wonder to the Earth. Wonder can be awe, can be a sense of fear, can show you how much you are at the mercy of nature. Science-fiction fans and followers are often called 'freaks' because they are sometimes aware of other dimensions of life. Most people are only concerned with 'Which tie am I going to wear?' That's their one dimension.

"But, as we know, we're all lost in a cosmic haze here."



Leonard Nimoy (left) and Donald Sutherland take a break on the Body Snatchers set.

MAGNIFICENT WOMEN. HEROIC MEN.

THE FANTASTIC ART OF BORIS VALLEJO

THE STUFF
THAT
DREAMS
ARE
MADE OF...



Ballantine Books

A Division of Random House, Inc.

Boris Vallejo's special artistry strikes a deep and responsive chord in all our imaginations and renders our fantasies life-like and real.

In the six years since his work first graced the covers of books by Edgar Rice Burroughs and the Doc Savage stories, his stunning illustrations have found a wide and delighted audience among readers of science fiction, fantasy, mystery and romance. 40 full-color plates and black-and-white illustrations. Trade paperback \$7.95 Simultaneous hardcover \$12.95

F
Please send me paperback at \$7.95 plus \$1.05 for postage & handling for each book ordered.
Please send me hardcover at \$12.95 plus \$1.05 for postage & handling for each book ordered.
Mail to: FANTASTIC ART OF BORIS % STARLOG Magazine 475 Park Avenue South New York, NY 10016
Name
Address

State

Zip

City

THE INVISIBLE VISIONS OF STAR WARS

critic David Sheehan called Star Wars "mindless" and agreed with Harlan Ellison that the space epic was "junk food for the mind."

In spite of admonitions not to compare, many are concluding that while Star Wars may bring out the kid in all of us, it is really Close Encounters Of The Third Kind that will live alongside Things To Come and Metropolis in the serious-science-fiction hall of fame.

Even George Lucas, creator of Star Wars, has acquiesced to the notion that Star Wars is lightweight, and there is almost universal agreement that there is nothing of any philosophical import in it.

Yet Star Wars continues to break box-office records worldwide—more than a year after its release. "Kids" of all ages are returning to see it again and again. It is besting Star Trek and James Bond in popularity and "phenomenon" status. The Lucasfilms office is surely adding shelves to their trophy case to hold the film's seven Oscars, special Hugo and Nebula awards, and other tributes.

Is it that the public prefers mindless entertainment, and that awards are given for monetary success? Or are those who call *Star Wars* mindless overlooking something? If they are, the overlooked qualities might lie in the realm of invisible visions.

When Luke and Leia swing on a thin line across the bottomless *Death Star* power shaft, there's more than meets the senses going on, more than spectacle, familiar heroics, glorious music, and exciting action. There's a vision of Humankind as a being capable of exercising ingenuity in a terrifying situation, a being courageous enough to act even though the life-and-death odds are stacked overwhelmingly against him.

When Luke walks forlornly out of his home after being told he cannot attend Academy this year, he faces the setting double suns; the music swells; and implanted in the audience's subconscious is a vision of Man capable of so strong a desire to better himself that when forward progress is thwarted, deep despair is experienced.

As Leia delivers her "I recognized your foul stench when I came aboard" line to Tarkin, we are shown a vision of a mind able to see reality accurately, differentiate as a matter of habit between good and evil, and to act ac-

cordingly. We are given a vision of moral integrity.

Ben Kenobi knows his time has come; he raises his lightsaber solemnly into a useless position, smiles slightly, and allows Vader to deliver the final blow. Subliminally, the audience records a vision of a Humanity almost godlike in its certainty of the rightness of its action. Greater self-confidence than that hath no man.

At the climax, when Han Solo comes triumphantly to Luke's rescue in the Death Star trench, the vision available is of a man learning to value the lives of others to such an extent that his entrenched cynicism is defeated. Short-sighted, self-centered Han Solo has entered that larger world Kenobi, earlier, spoke to Luke about.

Such invisible visions occur throughout *Star Wars*. They are communicated not by any single line of dialog, not by the action of any moment, but by the *context* of the characters in the unfolding story.

The nature of art is still under dispute, but one of the most agreed-upon descriptions requires art to be non-utilitarian and worthy of contemplation for its own sake. Yet critics persist in condemning *Star Wars* because it fails to make a useful (utilitarian) comment about the shortcomings of human nature and contemporary society. They call *Star Wars* escapist and condemn the characters for failing to reveal alleged sordid aspects of human nature.

Mindless? Well, Star Wars certainly does not offer the intellectual puzzles and exercises some science fiction is capable of. But contemplated for its own sake, Star Wars allows an audience member to glimpse the noblest aspects of his species. In this sense, the film is universally "relevant" and touches the very soul of an idealistic man.

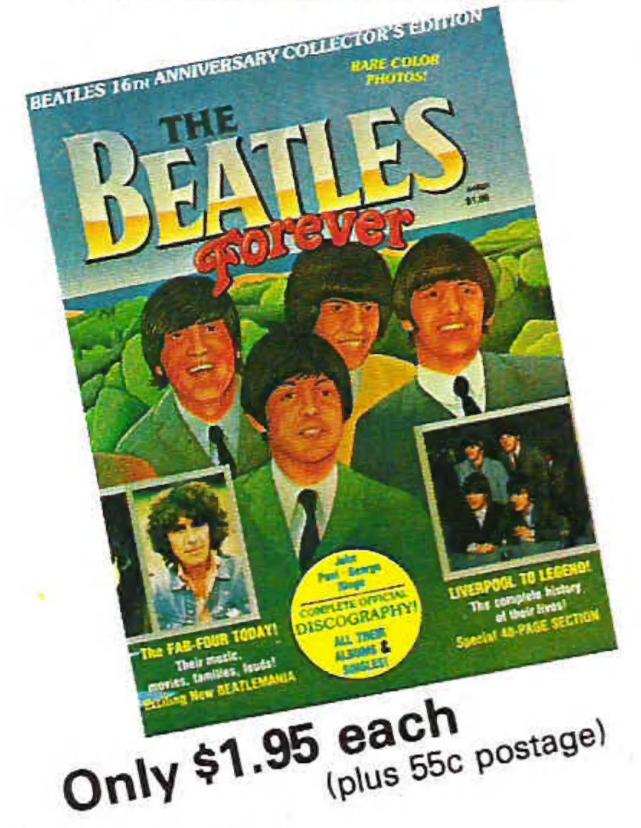
Star Wars, in its depiction of Mankind as heroic, does not take place "long ago, in a galaxy far far away." It takes place now, in the past and in the future, here, and wherever creatures must make decisions and take action in order happily to survive.

Star Wars will remain popular—and extraordinarily valuable—as long as there are people who enjoy being reminded, in an imaginative and exciting way, that survival, success, and happiness are right and proper states of being.



The thrilling and always-cheered swing to freedom on the Death Star.

NEW EDITION:



* Over 150 rare BEATLEPIX—including many in FULL COLOR!

* Their lives TODAY!

* A complete 40-page PHOTO-HISTORY—from Liverpool to Legend!

* The marvelous movies and musical magic of the magnificent mopheads!

* Complete DISCOGRAPHY: singles & albums, the group together & all the individual records!

Their families, their feuds, and their incredible fans!

* The cast of characters surrounding them!

* All the SPINOFFS: Broadway's "Beatlemania," the "Sgt. Pepper" movie, the imitators, the powerful effects today!

It's all here in this brand new COLLECTOR'S EDITION MAGA-ZINE, loaded with color photos, and available for a limited time only at \$1.95 per copy. ORDER TODAY!!!

Send cash, check or money order to:

O'Quinn Studios, Inc. 475 Park Ave. South New York, NY 10016

Sena copies	OT THE
BEATLES FOREVER	at just \$1.95
each plus 55c posta	ge charge per
copy.	
Enclosed: \$	
Be sure to include 55c	postage and
handling for each copy	
NAME	
ADDRESS	
CITY	
STATE	ZIP
	ZIP

is good for the health of a magazine—it tends to boost circulation and ease a smile out of the natural frown that most publishers are apparently born with. (Fortunately both of STARLOG's publishers were born with artistic souls, causing them to frown only when things are going unexpectedly well.)

In issue #12 we presented our landmark coverage of Close Encounters Of The Third Kind, devoting more space in a single issue to this film than to any other feature in the history of the magazine. It contained Ed Naha's fine in-depth reporting (including quotes from the actors, director, producers and effects people), incredible color photos from both sides of the camera and loads of behind-the-scenes information. The full-color centerspread featured Randy Weidner's sensational painting of the Mothership rising over Devils Tower.

Surprisingly, although the issue sold very well, only a small portion of our readers wrote in to comment on the feature coverage. (We did, however, get immediate feedback from Columbia Pictures, which loved the issue, and from Steven Spielberg's office—they requested a reproduction of the center-spread painting for Steven.)

Instead, most letter writers chose to respond—with much enthusiasm, energy and venom—to the LAST-WORD editorial on CE3K in that same issue. Dozens of irate letters poured across my desk in the weeks that followed the publication of #12. While it was gratifying to see that my words could move so many to write, the reason behind much of the hostility was a bit confusing. In no way do I wish to stop readers from enjoying this cathartic exercise, but perhaps I should make a couple of things clear.

First of all, even a casual rereading of that column will show the reader that I did not think *CE3K* was a terrible film. I was disappointed in it as science fiction, but that was based on my extremely high expectations. (I am now looking forward with great trepidation to the proposed sequel.)

Secondly, it became obvious that not all readers are aware of the nature and purpose of an editorial: it is a personal platform for subjective statements. Editorials are written by the people responsible for the overall content and point of view of the publication. (You will note that in Mr. Naha's coverage of the film at no time are his personal opinions expressed; this is known as objective reporting. The place for opinions about any subject is in a column or an editorial.)

There were also many correspondents who disagreed with my comments and expressed their objections in a clear, concise and cogent manner. On the whole, the letters were entertaining (sometimes thought-provoking) and gave us enough material for several pages of COMMUNICATIONS.

And while I'm on the subjects of both letter writing and CE3K, I'd like to get in a little plug. In issue #4 of our excellent sister publication, FUTURE, there is a film review column by noted SF author Ursula K. LeGuin. She takes on both Star Wars and Close Encounters in an article entitled "Noise and Meaning in SF Films." If you are interested in outspoken opinions, I humbly recommend this issue.

As I stated before, a little bit of controversy can be good for a publication, but rest assured that at STARLOG we never look to intentionally insult or provoke. We do aim to *stimulate*, however, as well as entertain. That is, after all, what science fiction is all about.

Howard Zimmerman/Editor

NEXT ISSUE: SPECIAL FREE BONUS!!

STARLOG No. 17—Our FALL TV PREVIEW ISSUE—will contain an EX-CLUSIVE FULL-COLOR FOLD-OUT POSTER OF BATTLE STAR "GALACTICA" PREPRODUCTION ARTWORK BY THAT INCREDIBLE STAR WARS ARTIST, RALPH MCQUARRIE. Plus: Many other neverseen-before McQuarrie paintings done for Star Wars, Star Trek—The Movie and Galactica, and an exclusive interview with Ralph McQuarrie. Of course we'll also have our regular features in addition to the latest news on all upcoming SF TV shows set for the fall.

STARLOG No. 17

on sale

TUESDAY, AUGUST 29, 1978

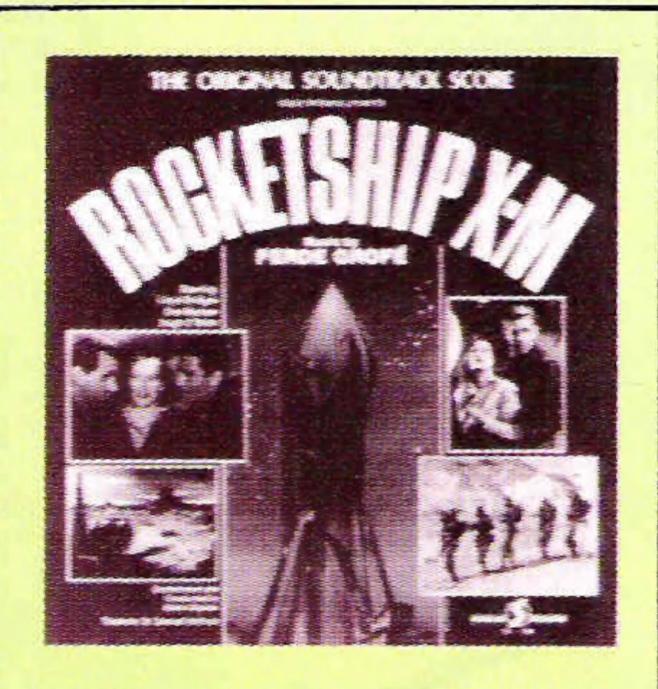
NEW

ORIGINAL SOUNDTRACK MUSIC

From Science-Fiction and Adventure Movies!

HEAR:

- *Exciting Orchestral Suites!
- **★** Glorious Melodies!
- Thundering, Soaring Music!



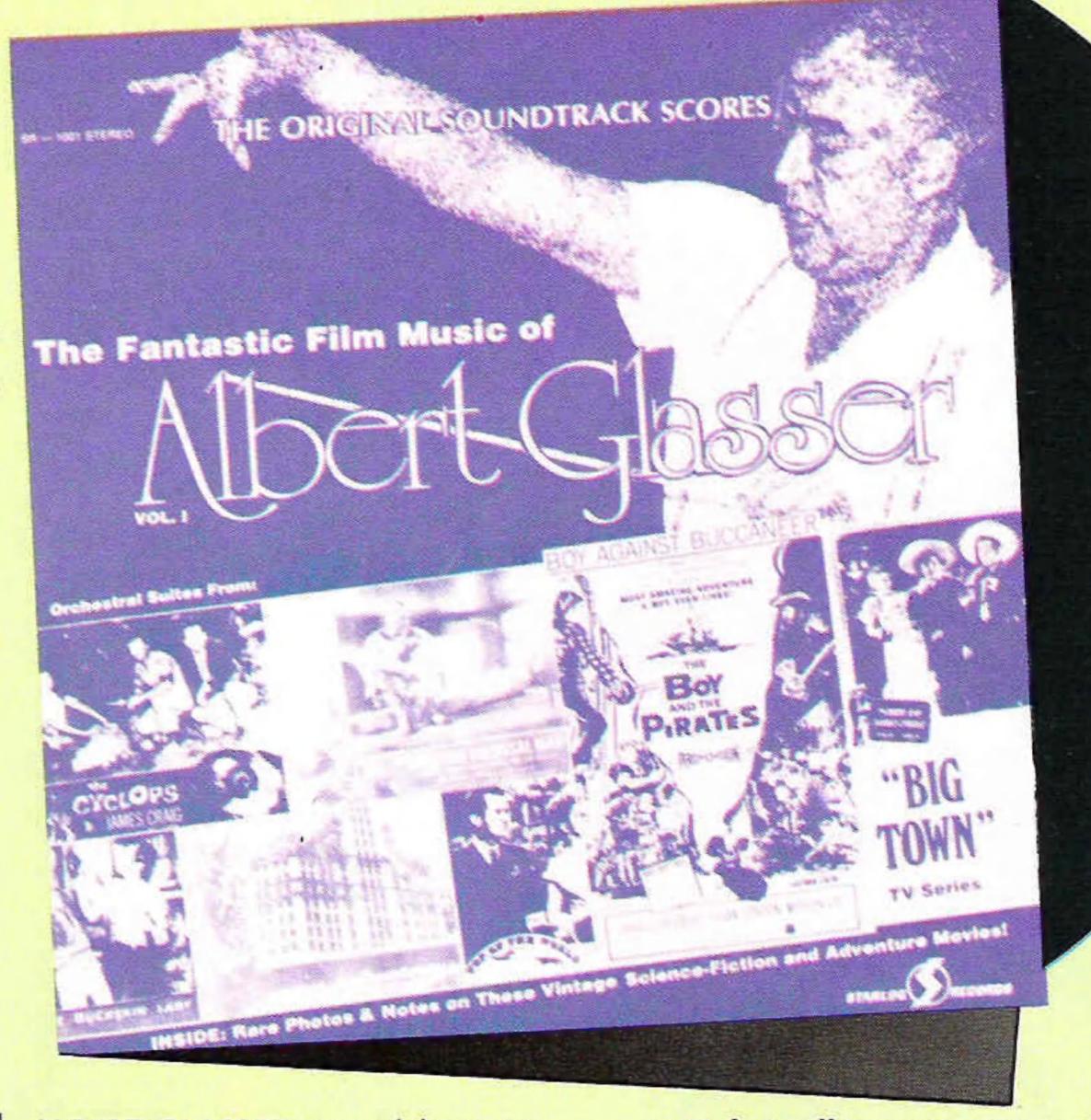
Our Premiere Release...

For the first time, a soundtrack record of the classic 1950 movie of Man's first step into space.

The dramatic full-orchestra score (complete on this album) is a stunning example of early Romantic film music — the type that inspired scores like "Star Wars."

The composer is Ferde Grofe, best known for his "Grand Canyon Suite" and other American music classics, and this is his only soundtrack album. The theremin, the wailing electronic instrument used in Hitchcock's "Spellbound," is heard throughout the Mars sequences.

A "must" for science-fiction fans and soundtrack collectors, the album includes photos and extensive background notes. A valuable collector's item, available only through this ad and in limited select outlets.



ALBERT GLASSER, one of the most prolific and talented music composers of Hollywood's Golden Age, wrote, arranged and conducted over 125 movie scores — none of which were ever released on records and most of which were never heard and appreciated properly underneath the dialogue and sound effects of the double-feature thrillers they enhanced.

STARLOG RECORDS has selected musical highlites from some of the best movie scores of Albert Glasser. We are proud to present a rare collection of dynamic film music.

Total Enclosed: \$

- Deluxe album opens up and includes rare photos and notes on all the shows — complete with cast, credits and other valuable data.
- Stereophonic Sound: Our first release that includes glorious, full-dimensional music.
- Almost 1 Hour of enjoyable listening.
- Available only through this ad and in select outlets. (Not distributed to general record stores.)
- None of this music has ever been previously released.
- High-quality, custom vinyl pressings.
- Limited run order your copy today!

ORDER TODAY!!!

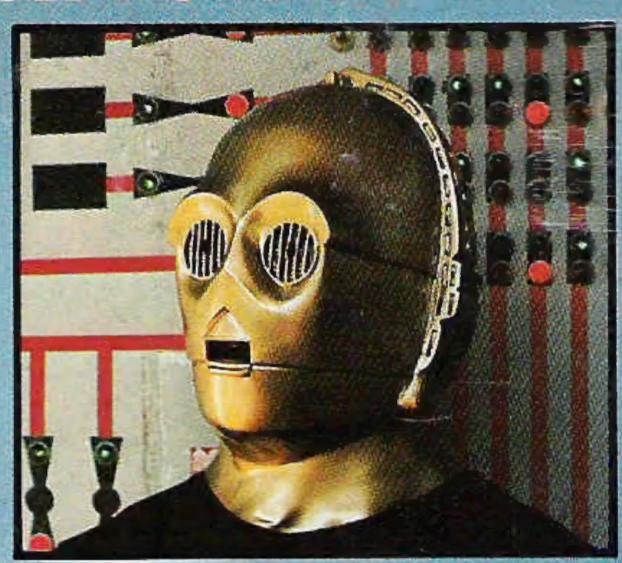
Send cash, check or money order to: STARLOG RECORDS 475 Park Ave. South New York, NY 10016	—— "The Fantastic Film Music of ALBERT GLASSER" \$7.98 (plus postage & handling) —— "ROCKETSHIP X-M" \$6.98 (plus postage & handling)
NAME / OS /	30NES666
CITY	
STATE	ZIP
POSTAGE & HANDLING: U.S.A. — 4th Class postage: \$.52 each record — 1st Class postage: \$1.52 each record Canada — each record (U.S. funds): \$2.02 Foreign — each record (U.S. funds): \$4.02	DEALERS: Write for wholesale rates on these, and exciting future releases from STARLOG RECORDS. NOTE: Send order on separate paper, if you don't want to

cut out coupon.

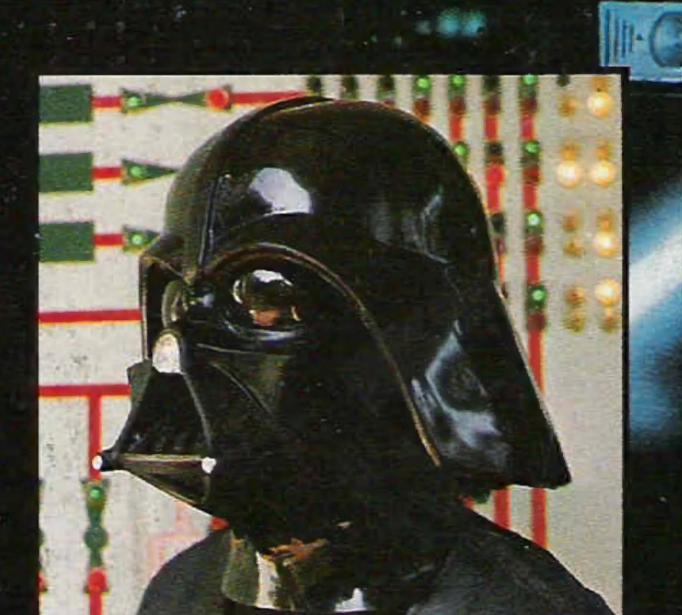
this is the Greatest Collection of Heroes and Villains in this or any other Galaxy . . .

tm

ONLY \$39.95 ea.



C-3PO See-three PIO, the human robot relations automation



DARTH VADER Personification of the evil Galactic Empire.



STORMTROOPER The Drone of the Galactic Empire who carries out a reign of terror.



CHEWBACCA The giant Wookie Co-pilot of the Millenium Falcon.

Chewie is made from soft latex with hand-applied hair that gives him an incredible life-like appearance. Vader and the Stormtrooper are both rigid helmets that have smoked plastic eyes and fit over the entire head just like the originals used in the movie. C-3PO completes the set in a soft vinyl for ease of use and hours of adventure.

© Twentieth Century Fox Film Corp. 1977

Special Offer Now! Only \$9.50

Available only from . . .

FANTASY CLASSICS INC.

The Original Soundtrack Album from

FORBIDDEN PLANET

with a Full Color Poster of Robby the Robot.

It's much more than music. The sounds include Effects for the ID Monster, the C-57D Space Cruiser and many other tonalities used throughout the film. SEND TO: FANTASY CLASSICS, INC.

811 MILFORD STREET • GLENDALE, CALIF. 91203

PLEASE PRINT

NAME_

ADDRESS _

State _____

ZIP_

ITEM(S) _

CITY

AMOUNT ENCLOSED \$ Send Check or Money Order • Add \$1.50 Shipping & Handling. California residents add 6% Sales Tax.